



UICC LIBRARY

AUG - 5 1975

DOCUMENTS

ADVANCE SHEETS UICC LIBRARY

OF

AUG - 5 1975

TWENTY-SECOND ANNUAL REPORT DOCUMENTS

OF THE

RAILROAD AND WAREHOUSE COMMISSION OF ILLINOIS.

RAILROADS, FOR THE YEAR ENDING JUNE 30, 1892, GRAIN
INSPECTION DEPARTMENT, OCTOBER 31, 1892,
OFFICE EXPENSES, DECEMBER 1, 1892.

COMMISSIONERS:

ISAAC N. PHILLIPS, BLOOMINGTON, *Chairman.*
JOHN R. WHEELER, CHICAGO. J. C. WILLIS, METROPOLIS.
J. H. PADDOCK, SPRINGFIELD, *Secretary.*

SPRINGFIELD, ILL.:
H. W. ROGGER, STATE PRINTER AND BINDER.
1892.

TWENTY-SECOND ANNUAL REPORT.

STATE OF ILLINOIS,
RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, December 1, 1892.

To His Excellency, HONORABLE JOSEPH W. FIFER, Governor of Illinois:

We have the honor to submit to you the twenty-second annual report of the Railroad and Warehouse Commission of this State.

TABULATED STATISTICS.

Attention is called to the statistical tables contained in this report which give information on the following subjects, to-wit:

- Table I. Classification of Railroads and Mileage.
- Table II. Railway Capital at the close of the year ending June 30, 1892.
- Table III. Income Account, Entire Line.
- Table IV. Earnings and Income in Illinois.
- Table V. General Expenditures in Illinois.
- Table VI. Passenger and Freight Traffic in Illinois.
- Table VII. Classified Freight Traffic in Illinois.
- Table VIII. Employés and Salaries in Illinois and Entire Line.
- Table IX. Average Daily Compensation of Employés in Illinois.
- Table X. Description of Equipment, Entire Line.
- Table XI. Rails, Ties, Ballast, Bridges, etc., in Illinois.
- Table XII. Consumption of Fuel by Locomotives in Illinois.
- Table XIII. Accidents in Illinois.
- Table XIV. Taxes paid in Illinois in 1890, 1891 and 1892.

A summary of the tables above mentioned is as follows:

TABLE I. CLASSIFICATION OF RAILROADS AND MILEAGE.

The railway mileage of this State on June 30, 1892, was as follows:

	Miles.	Miles.
Main line and branches.....	10,276.19	
Second, third, fourth and additional tracks.....	1,082.61	
Yard track, sidings, etc.....	3,319.08	
Total.....		14,677.88

The following is a comparison with the mileage for the year ending June 30, 1891:

Year.	Main Line.	Second third and fourth tracks.	Sidings, etc.	Total.
1891.....	10,179.94	1,056.22	3,081.15	14,317.31
1892.....	10,276.19	1,082.61	3,319.08	14,677.88
Increase.....	96.25	26.39	237.93	360.57
Per cent. of increase.....	.94	2.50	7.72	2.52

The new road built during the year was 102.89 miles, being an increase over the previous year of 52.19 miles, or 102 per cent. Illinois still leads all the States in the Union in the total railway mileage constructed and in operation, and in the number of miles of railway per square mile of territory.

TABLE II. RAILWAY CAPITAL AT THE CLOSE OF THE YEAR ENDING JUNE 30, 1892.

The railway capital of the railroads doing business in the State of Illinois is as follows:

Capital stock.....	\$875,359,740	
Funded debt.....	1,034,036,059	
Current liabilities.....	68,003,791	
Total.....		\$1,977,399,590
Capital stock per mile of road.....	\$24,532	
Funded debt per mile of road.....	28,854	
Current liabilities per mile of road.....	1,873	
Total.....		55,259

An examination of this table shows that the proportion of capital stock to the total railway capital is 44.26 per cent., the proportion of funded debt to the total railway capital is 52.79 per cent., and the proportion of current liabilities to the total railway capital is 2.95 per cent.

The increase in the total railway capital as compared with last year is \$30,735,820.

TABLE III. INCOME ACCOUNT—ENTIRE LINE.

The following statistics are gathered from this table:

Gross earnings from operation.....	\$306,618,011 79
Operating expenses.....	206,049,930 77
Income from operation.....	100,568,081 02
Total income from other sources.....	13,858,227 21
Total income.....	114,426,308 23
Expenses assignable to fixed charges.....	80,086,358 33
Net income (54 roads).....	36,616,701 29
Net deficit (27 roads).....	2,276,751 39

Fifteen operating and eleven leased or subsidiary roads paid dividends during the year amounting to \$25,327,515.47. In 1891 fourteen operating and ten leased or subsidiary roads paid dividends amounting to \$24,078,050.48. The dividends paid during the year ending June 30, 1892, show an increase over the dividends paid during the year ending June 30, 1891, of \$1,249,464.99, or 5.19 per cent.

The following roads failed to earn enough to pay operating expenses: The Centralia & Chester, East St. Louis Connecting and Pawnee.

A comparison of the roads paying dividends in 1891 and 1892 is shown in the following tables:

Name of Company.	1891.	Per cent on Com. Stock.	Per cent on Pref. Stock.
Chicago & Alton.....	\$1,407,560 00	8	8
Joliet & Chicago.....	105,000 00	7	.....
Mississippi River Bridge.....	21,000 00	7	.....
Chicago & Eastern Illinois.....	275,919 00	.....	6
Chicago & Western Indiana.....	100,000 00	2	.....
Chicago & Northwestern.....	3,445,804 00	6	7
Chicago, Burlington & Quincy.....	3,437,667 00	4.5	.....
Liverpool Coal.....	2,500 00	10	.....
Chicago, Milwaukee & St. Paul.....	1,532,153 00	.....	7
Chicago, Rock Island and Pacific.....	1,846,232 00	1	.....
Peoria & Bureau Valley.....	120,000 00	8	.....
Cleveland, Cincinnati, Chicago & St. Louis.....	1,318,321 78	3	5
Illinois C ntral.....	2,250,000 00	5	.....
Lake Erie & Western.....	473,600 00	.....	1
Lake Shore & Michigan Southern.....	3,215,322 50	6.5	.....
Michigan Central.....	936,910 20	5	.....
Joliet & Northern Indiana.....	21,000 00	8	.....
New York, Chicago & St. Louis.....	175,000 00	.....	3.5
Pittsburgh, Cincinnati, Chicago & St. Louis.....	222,110 00	.....	1
Pennsylvania Company—			
Pittsburgh, Ft. Wayne & Chicago.....	2,263,653 75	7	7
Rock Island & Peoria.....	75,000 00	5	.....
St. Louis, Alton & Terre Haute—			
Belleville & Southern Illinois.....	113,857 50	.....	8.93
Terminal Railroad Association—			
St. Louis Bridge.....	239,400 00	.....	{ 6 1st
Terre Haute & Indianapolis—			{ 3 2d
St. Louis, Vandalia & Terre Haute.....	477,005 75	.....	7
Total.....	\$24,078,050 48	.....	.....

Name of Company.	1892.	Per cent on Com. Stock.	Per cent on Pref. Stock.
Chicago & Alton.....	\$1,407,560 00	8	8
Joliet & Chicago.....	105,000 00	7	.....
Mississippi River Bridge.....	21,000 00	7	.....
Chicago & Eastern Illinois.....	283,986 00	.....	6
Chicago & Western Indiana.....	225,000 00	4.5	.....
Chicago & Northwestern.....	3,675,750 00	6	7
Chicago, Burlington & Quincy.....	3,628,719 75	4.75	.....
Liverpool Coal.....	2,500 00	10	.....
Chicago, Milwaukee & St. Paul.....	1,572,613 00	.....	7
Chicago, Rock Island & Pacific.....	1,384,674 00	3	.....
Peoria & Bureau Valley.....	120,000 00	8	.....
Cleveland, Cincinnati, Chicago & St. Louis.....	1,340,000 00	3	5
Illinois Central.....	2,250,090 00	5	.....
Iowa Central.....	55,364 00	.....	1
Lake Erie & Western.....	532,800 00	.....	4.5
Lake Shore & Michigan Southern.....	3,215,322 50	6.5	.....
Michigan Central.....	1,030,601 22	.....	5.5
Joliet & Northern Indiana.....	24,000 00	8	.....
New York, Chicago & St. Louis.....	150,000 00	.....	3
Pennsylvania Company—			
Pittsburgh, Ft. Wayne & Chicago.....	2,385,151 00	7	7
Pittsburgh, Cincinnati, Chicago & St. Louis.....	895,573 00	.....	4
Rock Island & Peoria.....	225,000 00	15	.....
St. Louis, Alton & Terre Haute—			
Belleville & Southern Illinois.....	102,000 00	.....	8
St. Louis Southern.....	23,000 00	5	.....
Terminal Railroad Association—			
St. Louis Bridge.....	239,400 00	.....	{ 6 1st 3 2d
Terre Haute & Indianapolis—			
St. Louis, Vandalia & Terre Haute.....	432,516 00	.....	7
Total.....	\$25,327,515 47	.....	.....

TABLE IV. EARNINGS AND INCOME IN ILLINOIS.

The earnings and income in Illinois are shown in the following:

Passenger department—		
Passenger revenue.....	\$17,228,466 54	
Mails.....	1,913,214 66	
Express and extra baggage.....	1,451,095 48	
Total, including miscellaneous.....		\$21,091,833 60
Freight department—		
Freight revenue.....	\$51,867,845 78	
Total, including miscellaneous.....		\$52,082,468 20
Other earnings from operation.....		3,302,136 23
Total earnings from operation.....		\$76,476,438 03
Income from property owned but not operated.....		5,316,574 40
Total earnings and income.....		\$81,793,012 43

The following additional facts are also shown in this table:

Revenue per passenger per mile, cents.....	2.0935
Passenger earnings per train mile, dollar and cents.....	\$1.01.632
Proportion of passenger earnings to total earnings, per cent.....	27.58
Revenue per ton of freight per mile, cents.....	.8618
Freight earnings per train mile, dollar and cents.....	\$1.53.931
Proportion of freight earnings to total earnings, per cent.....	68.12
Total earnings per train mile, dollar and cents.....	\$1.35.393
Proportion of total earnings to total income, per cent.....	93.49
Proportion of income from property owned but not operated to total income, per cent.....	6.51

In arriving at the above averages, per cents, etc., only those roads which have made complete detailed reports are taken into consideration.

In the passenger department these figures show an increase over those of last year of \$1,120,971.36, or 6.96 per cent. in the receipts from passengers, an increase in the receipts from mails of \$247,677.94, or 14.87 per cent., an increase in the receipts from express and extra baggage of \$8,125.20, or 5.6 per cent. and an increase in the total receipts from passenger department of \$1,437,025.99, or 7.31 per cent.

In the freight department there is an increase over last year in the receipts from freight of \$5,962,864.98, or 12.99 per cent., and a total increase in the freight department of \$5,951,442.28, or 12.91 per cent.

The receipts from miscellaneous sources of operation show an increase over the receipts of last year of \$991,981.09, or 42.94 per cent.

The total earnings from operation show an increase over the receipts of last year of \$8,380,449.36, or 12.30 per cent., and the total earnings and income show an increase of \$8,293,845.99, or 11.28 per cent.

The following table gives a comparison of the earnings of the passenger and freight departments in Illinois for the last four years:

	Passenger.	Freight.
1889.....	\$17,494,685 97	\$39,706,082 40
1890.....	17,463,866 77	44,133,597 31
1891.....	19,654,807 61	46,131,025 92
1892.....	21,091,833 60	52,082,468 20

TABLE V. GENERAL EXPENDITURES IN ILLINOIS.

The total expenditures in Illinois for the year were \$71,686,106.54, divided as follows:—Operating expenses, \$50,457,276.36, or 70.38 per cent. of the total; and fixed charges, \$21,228,830.18, or 29.62 per cent. of the total.

The operating expenses for the year are divided as follows:

Maintenance of way and structures.....	\$9,490,843 06
Maintenance of equipment.....	8,155,071 87
Conducting transportation.....	26,754,898 69
General expenses.....	6,056,462 74
Total.....	\$50,457,276 36

This table also shows the following:

	Per cent. of total operat'g expense.	Per cent as- signable to pas'gr. traffic.	Per cent. as- signable to freight traffic.
Maintenance of way and structures.....	18.80	36.94	63.06
Maintenance of equipment.....	16.16	26.56	73.44
Conducting transportation.....	53.02	29.95	70.05
General expenses.....	12.02	38.09	61.91
Total.....		31.53	68.47

Proportion of operating expenses to operating income, 65.98 per cent.

These figures show an increase over the operating expenses of last year of \$5,322,231.17, or 11.79 per cent.

The following is a comparison of the operating expenses in Illinois for the last four years:

1889.....	\$39,292,024 43
1890.....	40,059,894 30
1891.....	45,135,045 19
1892.....	50,457,276 36

The fixed charges are divided as follows:

Interest.....	\$14,669,947 47
Rents.....	2,482,858 22
Taxes.....	3,350,990 00
Miscellaneous.....	725,034 49
Total.....	\$21,228,830 18

Attention is called to the following summary and deductions from this table:

Average cost of carrying one passenger one mile.....cents	1.9153
Cost of running passenger train one mile..... "	76.876
Cost of carrying one ton of freight one mile..... "	.56808
Cost of running freight train one mile.....dollar and cents	\$1.01, 157
Average cost per train mile of all trains earning revenue..... "	90.639

Additional Results Deduced from Tables IV and V for the year ending June 30, 1892.

PASSENGER SERVICE.	
Revenue per passenger per mile.....cents	2.0935
Average cost of carrying one passenger one mile..... "	1.9153
Difference.....cents	.1782
Revenue per train mile, passenger trains.....	\$1.01, 632
Average cost of running a passenger train one mile.....cents	76.876
Difference.....cents	24.756

FREIGHT SERVICE.

Revenue per ton of freight per mile	cents	.8618
Average cost of carrying one ton one mile	"	.5680
Difference	cents	.2938
Revenue per train mile, freight trains		\$1.53.931
Average cost of running a freight train one mile		1.01.157
Difference	cents	52.774

TABLE VI. PASSENGER AND FREIGHT TRAFFIC IN ILLINOIS.

This table shows the following:

Passenger traffic—		
Number of passengers carried earning revenue		36,282,537
Number of passengers carried one mile		729,663,484
Average distance carried—miles		24.44
Average amount received from each passenger—cents		51.16
Passenger earnings per mile of road		\$2.144.75
Freight traffic—		
Number of tons carried earning revenue		59,441,336
Number of tons carried one mile		5,246,210,552
Average distance haul of one ton—miles		91.92
Average amount received for each ton—cents		79.216
Freight earnings per mile of road		\$5.293.57
Gross earnings from operation per mile of road		7,772.93
Expenses per mile of road		5,128.39
Net earnings per mile of road		\$2,644.54

Attention is called to the following comparative summary for the years 1892 and 1891:

Comparative Summary of Passenger and Freight Service for the years ending June 30, 1892 and 1891.

Item.	1892.	1891.	Increase.	Decrease.
Passengers carried	36,282,537	32,178,183	4,104,354	.....
Passengers carried one mile	729,663,484	720,695,214	8,968,270	.....
Passengers carried one mile per mile of line	84,447	74,987	9,460	.....
Tons carried	59,441,336	54,048,837	5,392,499	.....
Tons carried one mile	5,246,210,552	4,957,155,440	289,055,112	.....
Tons carried one mile per mile of line	626,425	522,902	103,523	.....
Passenger train mileage	18,042,798	17,373,493	669,305	.....
Average number of passengers in train	40	41	.....	1
Average journey per passenger—miles	21.44	22.49	1.95	.....
Freight train mileage	29,159,471	27,247,782	1,911,689	.....
Average number of tons in train	179.91	181.96	.....	2.05
Average haul per ton—miles	91.92	91.39	.....	2.47

Comparative Summary of Results Deduced from Tables IV, V and VI for the years ending June 30, 1892, 1891, 1890 and 1889.

Item.	1892.	1891.	1890.	1889.
Revenue per passenger per mile	cents 2.0935	2.1671	2.066	2.038
Average cost of carrying one passenger one mile	" 1.9153	1.9580	1.900	1.721
Revenue per ton of freight per mile	" .8618	.8775	.832	.836
Average cost of carrying one ton one mile	" .5680	.5740	.517	.513
Revenue per train mile, passenger train	\$1.01.632	.96.9000	76.500	74.000
Average cost of running a passenger train one mile	" 76.876	73.8900	.....	.....
Revenue per train mile, freight train	\$1.53.931	\$1.45.424	.....	.....
Average cost of running a freight train one mile	" 1.01.157	95.8300	.....	.....
Revenue per train mile, all trains	1 35.393	\$1.28.4100	.....	.....
Average cost of running a train one mile, all trains	cents 90.699	85.4800	.....	.....
Percentage of operating expenses to operating income	65.98	66.16	63.09	66.90

A number of the roads doing a large business in the state have failed to report the necessary data, therefore making it impossible to give averages, etc., which will apply to the whole state. The averages, etc., as shown above are only for those roads which have made full reports.

TABLE VII. CLASSIFIED FREIGHT TRAFFIC IN ILLINOIS.

This table shows that the railroads carried in Illinois during the year 62,021,974 tons of freight, which is an increase over the previous year of 5,448,625 tons, or 9.63 per cent. The following is a classified comparison of the tonnage for the years 1891 and 1892:

	1891. Tons.	1892. Tons.
Products of agriculture.....	9,943,721	12,817,446
Products of animals.....	5,000,568	5,260,707
Products of mines.....	17,598,520	19,862,729
Lumber.....	3,990,223	4,527,671
Merchandise.....	3,209,629	3,534,774
Manufactures.....	6,394,117	6,721,551
Ice.....	646,990	531,049
Miscellaneous.....	9,699,578	8,766,047
Total.....	56,573,349	62,021,974

TABLE VIII. EMPLOYÉS AND SALARIES IN ILLINOIS AND ENTIRE LINE.

The total number of employés in Illinois for the year, as shown by this table, was 66,680, and their aggregate annual salary was \$40,072,676.88. This is an increase during the year of 5,712 employés, or 9.36 per cent., and an increase in the compensation paid of \$3,184,025.81, or 8.63 per cent.

The following table shows the division of the employès:

General officers.....	339
General office clerks.....	2,800
Station agents.....	2,080
Other station men.....	7,922
Enginemen.....	3,039
Firemen.....	3,149
Conductors.....	2,044
Other train men.....	4,626
Machinists.....	2,339
Carpenters.....	3,566
Other shopmen.....	7,798
Section foremen.....	1,976
Other trackmen.....	11,817
Switchmen, flagmen and watchmen.....	5,261
Telegraph operators and dispatchers.....	1,542
Employés, account floating equipment.....	52
All other employés and laborers.....	6,330
Total.....	66,680

On the entire lines of the roads reporting to this Commission, as shown by this table, there were 211,946 employ es during the year, and their aggregate annual salary was \$123,310,-961.56.

TABLE IX. AVERAGE DAILY COMPENSATION OF EMPLOY ES IN ILLINOIS.

The highest and the lowest average daily compensation of the different classes of employ es, as taken from this table, is shown in the following:

	Highest daily compen- sation.	Lowest daily compen- sation.
General officers	\$23 96	\$1 09
General office clerks	5 11	1 28
Station agents	4 74	1 05
Other station men	3 57	66
Enginemen	4 87	1 98
Firemen	2 65	1 50
Conductors	3 70	99
Other train men	2 37	83
Machinists	3 44	1 59
Carpenters	2 50	1 43
Other shopmen	2 95	1 00
Section foremen	2 30	1 00
Other trackmen	2 38	95
Switchmen, flagmen and watchmen	2 61	83
Telegraph operators and dispatchers	2 62	1 30
Employ�es, account floating equipment	2 14	1 25
All other employ�es and laborers	4 43	65

TABLE X. DESCRIPTION OF EQUIPMENT ENTIRE LINE.

A summary of this table shows the following:

Class of Equipment.	Number.	Number fitted with train brake.	Per cent. of total.	Number fitted with au- tomatic coupler.	Per cent. of total.
Locomotives—					
Passenger	2,004	.....	.....	.....	.....
Freight	4,389	.....	.....	.....	.....
Switching	1,375	.....	.....	.....	.....
Totals	7,768	5,849	75.29	416	5.35
Cars—					
Passenger service	5,780	5,722	99.99	5,661	97.94
Freight service	233,531	34,859	14.92	43,856	18.78
Company's service	7,668	106	1.38	387	5.04
Fast freight line service	16,369	542	3.31	2,399	14.10
Totals	263,348	41,229	15.65	52,213	19.82
Total cars and locomotives owned	271,116	47,078	17.36	52,629	19.41
Cars and locomotives leased	14,924	2,054	13.76	1,415	9.48
Total equipment	286,045	49,132	17.17	54,044	18.89

A comparison of these figures with the equipment reported for last year shows an increase in the number of locomotives of 441, or 6.01 per cent.; an increase of 477 passenger cars, or 9 per cent.; an increase in the number of freight cars of 18,416, or 8.56 per cent.; an increase in the number of cars in company's service of 996, or 14.92 per cent.; a decrease in the number of cars contributed to fast freight line service of 382, and a total increase in the number of cars and locomotives owned of 19,948, or 7.94 per cent. In cars and locomotives leased there was a decrease of 7,044, or 32.05 per cent.

The increase in the number of train brakes and automatic couplers on equipment owned was as follows:

	Number train brakes.	Number automatic couplers.
Locomotives.....	928	78
Passenger service.....	472	461
Freight service.....	16,896	20,261
Company's service.....	27	199
Fast freight line service.....	259	596
Total.....	18,582	21,595

TABLE XI. RAILS, TIES, BALLAST, BRIDGES, ETC., IN ILLINOIS.

This table shows the following:

Iron rails on road in Illinois, main line and branches, miles.....	700.61
Steel rails on road in Illinois.....	9,138.20
Tons of steel rails relaid during the year.....	46,176.13
Ties relaid during the year.....	3,415,018
Number of stations.....	2,454
Ballast:	
Miles of stone.....	1,204.85
Miles of gravel.....	4,220.83
Miles of cinders.....	648.53
Miles of earth.....	3,390.95
Miles of sag.....	136.92
Miles of sand.....	111.75
Bridges:	
Number of stone.....	779
Number of iron.....	776
Number of wooden.....	1,387
Number of combination.....	61
Aggregate length in feet.....	238,445.95
Trestles:	
Number.....	10,009
Aggregate length in feet.....	767,563.48
Overhead highway crossings:	
Number of bridges.....	71
Number of conduits.....	3
Number of trestles.....	133
Overhead railway crossings:	
Number of bridges.....	28
Number of conduits.....	4
Number of trestles.....	22
Number of tunnels.....	3
Number of grade highway crossings.....	11,792

TABLE XII. CONSUMPTION OF FUEL BY LOCOMOTIVES IN ILLINOIS.

This table shows the amount of fuel consumed by locomotives, the number of miles run, and the average number of pounds consumed per mile. It shows that during the year there was consumed 2,966,019 tons of fuel in running 72,650,657 miles, or an average of 81.65 pounds per mile. The cost of coal at distributing points varied from 60 cents to \$2.55 per ton, and the cost of wood ranged from 50 cents to \$3.68 per cord.

TABLE XIII. ACCIDENTS IN ILLINOIS.

A comparison of the summary of this table with that of last year is as follows:

	1892.		1891.	
	Killed.	Injured.	Killed.	Injured.
Passengers	25	205	39	236
Employés.....	218	1,727	195	1,255
Others.....	477	508	434	407
Totals.....	720	2,440	668	1,898

The foregoing shows a decrease in the number of passengers killed during the year of 14, or 35.90 per cent.; a decrease of 31, or 13.13 per cent. in the number of passengers injured; an increase of 23, or 11.79 per cent. in the number of employés killed; an increase of 472, or 37.61 per cent. in the number of employés injured; an increase of 43, or 9.91 per cent. in the number of others killed; an increase of 101, or 24.81 per cent. in the number of others injured; an increase of 52, or 7.78 per cent. in the total number killed, and an increase of 542, or 28.55 per cent. in the total number injured.

The causes of accidents are shown in the following table:

	Killed.	Injured.
Coupling and uncoupling.....	45	669
Falling from trains and engines.....	42	186
Overhead obstructions.....	5	12
Collisions.....	32	171
Deraillments	10	53
Other train accidents	67	116
At highway crossings.....	97	130
At stations.....	70	123
Other causes	352	980
Totals.....	720	2,440

The foregoing shows an increase in the fatalities caused by accidents at highway crossings, at stations and from other causes. In this connection it may be of interest to state that of the total number of employes in Illinois—66,620—one death occurred for every 305 employed, and one injury for every 38 employed. Last year for every 312 employes there was one death and one injury for every 48 employes. Of the 218 employes killed, 45, or 20.64 per cent., met death while coupling and uncoupling cars and engines; and of the 1,727 employes injured, 669, or 38.73 per cent., were injured while coupling and uncoupling cars and engines. One of the most fatal classes of accidents to which trainmen are subject to is falling from trains and engines. The statistics for this year as compared with those for last year show a slight decrease in the number killed, but quite an increase in the number injured from this cause.

TABLE XIV. TAXES PAID IN ILLINOIS IN 1890, 1891 AND 1892.

A comparison of the amount of taxes paid in Illinois during the last three years is found in this table. Of the amount of taxes reported by the Illinois Central Railroad Co., \$571,724.72 thereof is 7 per cent. of the gross receipts paid to the State, and is included in the total amount of taxes reported paid by this company.

PROSPERITY OF THE PAST YEAR.

The foregoing summary and tables show, on the whole, a considerable increase in the business and earnings of the railroads of the state, and a corresponding increase in their expenses. With this increase in the volume of business it will be noted with regret that there has come a corresponding increase in the number of railway employes injured and killed. This does not, however, apply to the passengers transported, for, while the railroads of the state in the year ending June 30th, 1892, carried in round numbers four million (4,000,000) more passengers than in the previous year, fewer passengers were killed and injured this year than last. This shows, we think, that the conditions of passenger travel have been made better and safer; and is an index of the general modern tendency toward improved passenger equipment and management.

DUTIES OF THE COMMISSION.

The more important duties of this Board naturally group themselves under the following heads:

- (1.) The making of schedules of maximum rates, and their amendment from time to time as experience may dictate.
- (2.) The enforcement by prosecutions of the statutes against extortion and unjust discrimination.

(3.) The hearing and deciding of crossing cases under the Act of 1889; and also of cases for the protection of grade crossings under the Interlocking Act of 1891, in which classes of cases the Commission performs a *quasi* judicial function.

(4.) Precautions to secure the proper and safe physical condition of road-beds, bridges and trestles.

(5.) The making and enforcing of proper rules for the inspection of grain in the several inspection departments of the state, particularly in the city of Chicago.

(6.) The general supervision of warehouses of class "A," and of the warehousing of grain therein, registration of warehouse receipts, etc.

Causes of complaint frequently arise not included within the specific powers granted to the Commission. Where able to do so we have not hesitated, upon such grievances coming to our notice, to interpose our good offices with the railroad companies of the state, and in this way the Commission has been able to smooth out many complications between the companies and their patrons to the mutual benefit of both.

THE "J. S. E. LINE."

While the physical condition of the railroads of Illinois has, in general, undoubtedly improved, there are a few instances in which certain managers, have, we think, disregarded in some degree the safety and rights of the public. One instance of such a management is that of what is known as the "J. S. E. Line." Under that designation a line of road is operated from Pekin to East St. Louis by way of Jacksonville and Litchfield; another from Havana to Springfield; another from Springfield to Litchfield; another from Litchfield to Drivers; and yet another from Barnett to Columbiana.

The particular lines of this company between Havana and Springfield, and between Springfield and Litchfield, are in so bad a condition as to render them scarcely fit for use.

Managers having a proper regard for the safety of the public if operating such lines at all, would, it seems to us, limit the speed of their trains to twelve (12) or fifteen (15) miles per hour. We have ordered extensive repairs and improvements made on these lines but the disregard of this management to previous recommendations of the Commission, looking to the betterment of their roads, and their defiance of law in the matter of reporting, does not encourage us to hope that our recommendations will have attention before they are put into the form of positive court orders.

A BETTER LAW NEEDED.

We call the attention of your excellency to the defective and inadequate state of the law of Illinois, for compelling repairs to defective roadways and bridges. The act passed in 1887, on this subject might properly have been entitled, "An act to provide for certain circumlocutions without practical effect in the case of bad bridges and defective roadways." The statute says, in substance, that if the Commissioners find out that any railroad is unsafe and out of repair, they may cause it to be inspected by a competent engineer, and after such inspection, if the Commissioners are satisfied that the defects found ought to be remedied, it shall be their duty to "recommend" to the company operating the road, that the repairs deemed to be necessary shall be made. Then it is made the duty of the Commission, after "recommending," to set a day and give the derelict company 'an opportunity for a full and fair hearing on the subject of such investigation and recommendation.'" After having held the hearing as directed, if the managers of the company have been unable to convince the Commissioners that rotten bridges, open joints, broken ties, and dilapidated rails are a perfectly safe means of transportation, and the Commissioners are still obdurate enough to believe that the repairs formerly recommended should be made, then the Commissioners are directed to fix a time within which the necessary repairs and renewals shall be made by the company.

The act proceeds to say that "it shall be the duty of the corporation or person owning or operating said railroad to comply with such recommendations of said Board *as are just and reasonable.*"

It is then further provided that the courts shall have power to compel compliance with the orders of the Commission by mandamus. All of which we suppose means that after the Commissioners have held the "full and fair" hearing provided for by the act, the whole question as to whether their recommendations are just and reasonable, and whether the road really needs repairs is still to be litigated before a judicial tribunal. It seems to your Commissioners that the judicial proceeding could with great propriety be taken in the first instance, thus saving delay, and avoiding a great many circumlocutions which are without binding force. It is the duty of railroad managers to know the condition of their own roads, and it can never be necessary to inform managers through a hearing before the Railroad Commission that their roadbed and bridges are out of order. Managers who do not keep themselves advised in these particulars are unfit to have the lives and limbs of the public entrusted to their keeping.

Inasmuch as the physical condition of roads, and the adoption of safety appliances and improvements has come to be a matter of the highest importance, we respectfully submit that

further legislation is needed empowering the Railway Commissioners to deal in a more summary manner with companies whose managers persist in disregarding the safety of the public.

DUTIES OF CONSULTING ENGINEER.

The last General Assembly appropriated the sum of \$3,000 per annum for a consulting engineer, to work under the direction of the Commission. In pursuance of this act Mr. Charles Hansel was appointed to the place, and has filled the same with ability and to the entire satisfaction of the Commission. There exists great necessity for a continuance of this office, and for a further appropriation to enable the office to be maintained.

The examination of defective bridges, trestles and roadways requires an experienced engineer, and his task is not by any means light. Inspections of railways made at leisure and ease from the rear end of the general manager's car are of very little practical value. In the first place, it is not the good roads, but the poor and bad ones, which require inspection, and on these the work has need to be very thorough. The inspector should be an expert who thoroughly understands track and grade work. In making inspections he should use a hand or velocipede car, or else go on foot. The strength and probable duration of each bridge should be carefully estimated; condition of iron, ties and joints noted, and a record of all these things preserved in the office for future reference.

The results of some of the careful work done by Mr. Hansel in these particulars, and particularly the results of his expert knowledge and skill in directing the proper protection of grade crossings are now beginning to be seen in the decreased injuries to passengers shown in the statistics herewith furnished.

In the matter of the protection of crossings alone, a subject which has of late become an important part of the duties of the Railway Board, enough work is found to employ at least one-half of the Consulting Engineer's time. Besides the work done in the field in connection with interlocking, it is very necessary that accurate and complete records of all interlocking plants authorized in the state be kept in the office of the Commission. It is only in this manner that the permits issued by the Commission to run these crossings without stopping can be protected from abuse through changes made in the interlocking systems after the granting of the permits. Without a record kept in the office there would be no means of determining, when the question should arise in any case, whether changes had been made which would invalidate the permits issued.

Mr. Hansel, who is an expert draftsman, has instituted a method of recording plats of interlocking plants which we deem very excellent, and which is of high importance to the proper management of that part of the business.

An able and instructive report made to us by Mr. Hansel, setting forth the results of his study of railway safety appliances, etc., will be found printed in the appendix of this report.

THE INSPECTION OF GRAIN.

A number of inspection departments have in the last three years been established outside of the city of Chicago. None of these, however, have much business compared with that done by the Chicago department, which is justly celebrated in the large amount of grain which it examines and grades, and also in the wonderful uniformity which it has maintained in its inspection. We think it is safe to say there is no system of inspection in the world equal to that of Chicago. While other cities have been lowering their standards for the purpose of attracting grain to their markets, Chicago has demonstrated the better policy of maintaining high and uniform standards. The benefits of this are apparent in two marked particulars: First—The business of the inspection department of Chicago and of the grain trade of the city is growing at a rapid rate, thus wholly disproving the declarations of those who have insisted that the rigid inspection of grain of Chicago was rapidly driving trade from the city.

Second—The uniformity maintained has made the certificates of Chicago inspection good the world over. Grain can be sold upon these certificates in New York or anywhere in Europe reached by our cereal produce. This is not believed to be true of the inspection of any other western city, and is perhaps not true even of New York inspection.

The Chief Inspector's report shows the inspection by the Chicago department in round numbers of two hundred and forty-seven million (247,000,000) bushels of grain; and while the inspection of so enormous a quantity could not take place without some complaints, it is pleasant to note that the grading of only the smallest fraction of this grain has been the subject of contention or dispute. In the report of the Chief Inspector will be found a very interesting account of the requisites of good inspection, and of the manner in which the work is actually done in the Chicago department.

STORAGE OF GRAIN.

The report of Captain Turnbull, Registrar of Warehouses, which accompanies this and will be printed with it, shows that of the two hundred and forty-seven million (247,000,000) bushels of grain inspected and graded by the Chicago department, one hundred and ten million (110,000,000) bushels went into store in the warehouses of class "A." This is a large amount compared with former years, but is much less than half the grain inspected by the department. Much grain destined for the eastern market is transferred in Chicago, and nearly all of

this is inspected by the department. These inspections are made upon the voluntary call of the owners of the grain, the only inspection which is compulsory being that of grain going into store in warehouses of class "A." The fact that so much grain is inspected of which the law does not compel the inspection, is proof of the high estimation in which owners and shippers of grain hold the certificates of the Chicago department.

It is proper to acknowledge here the efficient aid which your Commissioners have had in the discharge of their official duties from their able corps of assistants. Mr. Hansel, the Consulting Engineer, has already been mentioned. The Secretary, Mr. Paddock, has received valuable aid in his labors from Mr. F. C. Dodds, clerk in the Department of Suits and Investigations. Mr. Dodds has been uncommonly diligent and faithful, and is a competent and obliging stenographer. The Secretary, Mr. Jas. H. Paddock, through a long and varied experience in public stations, has become perhaps as thoroughly conversant with public affairs as any man in the State. In former reports we have taken occasion to remark upon his very valuable services as Secretary of the Railway Commission. His continued service adds more and more to our appreciation of his character and of his ability as a public official. His services might almost be termed invaluable.

FINANCIAL STATEMENT.

The state of the funds appropriated for our use is shown in the following:

OFFICE EXPENSES.		
Unexpended appropriation December 1, 1891.....		\$3,357 24
Appropriation for year ending June 30, 1893.....		4,000 00
Total.....		\$7,357 24
Expended—		
Secretary's salary.....	\$1,500 00	
Janitor's salary.....	690 00	
Printing and binding.....	107 85	
Binding and mounting maps.....	587 50	
Postage.....	200 00	
Railway periodicals, books and newspapers.....	39 50	
Express, freight and drayage.....	507 25	
Telegraph.....	138 01	
Telephone.....	48 00	
Stationery and typewriter supplies.....	221 00	
Furniture, repairs and supplies.....	93 30	
Ice.....	36 00	
Extra clerk hire.....	63 63	
Washing towels for office.....	12 00	
Total.....		\$4,044 04
Unexpended balance December 2, 1892.....		\$3,313 20
SUITS AND INVESTIGATIONS.		
Unexpended appropriation December 3, 1891.....		\$3,750 00
Appropriation for year ending June 30, 1893.....		4,000 00
Total.....		\$7,750 00
Expended—		
Suits, investigations and expenses.....	\$2,212 35	
Clerk hire and stenographer.....	1,500 00	
Total.....		\$3,712 35
Unexpended balance December 2, 1892.....		\$4,037 65

RAILROAD MAPS.		
Unexpended appropriation December 1, 1891.....		\$1,200 00
Appropriation for year ending June 30, 1893.....		1,200 00
Total		\$2,400 00
Expended for maps.....		1,200 00
Unexpended balance December 1, 1892.....		\$1,200 00
SCHEDULES AND CLASSIFICATION.		
Unexpended appropriation December 1, 1892.....		\$2,000 00
CONSULTING ENGINEER.		
Unexpended appropriation December 1, 1891.....		\$1,750 00
Appropriation for year ending June 30, 1893.....		3,000 00
Total.....		\$4,750 00
Salary of Engineer for year.....		3,000 00
Unexpended balance December 1, 1892.....		\$1,750 00

Respectfully submitted,

ISAAC N. PHILLIPS,
J. C. WILLIS,

Commissioners.

STATISTICAL TABLES.

EXPLANATORY NOTES.

In the following statistical tables the principal operating road in an operating system and those which operate on their own account appear in alphabetical order; all subordinate roads are grouped under the roads to which they are leased or otherwise controlled, and are indented.

Chicago, Burlington & Quincy—Illinois earnings, expenses, etc., unofficial, and are estimated by office at 25 per cent. of the total.

Chicago & Iowa—Report for six months.

St. Louis, Alton & Springfield—Items reported for this road are not included in the totals of the columns.

Switching Roads—Belt Railway of Chicago, Chicago & Calumet Terminal, Chicago & Northern Pacific, East St. Louis & Carondelet, East St. Louis Connecting, Englewood Connecting, and Terminal Railroad Association of St. Louis.

COMPARATIVE TABLES.

TABLE I.—Classification of Railroads and

1	2	3
NAME OF COMPANY.	DATE OF FILING REPORT. (OPERAT- ING OR FINAN- CIAL.)	HOW OPERATED.
1 Atchison, Topeka & Santa Fe	Oct. 18, 1892	A., T. & S. Fe R. R. Co
2 Chicago, Santa Fe & California	Oct. 18, 1892 O.&F.	" " " "
3 Atch. Top. & Santa Fe in Chi.	Nov. 12, 1892 F.	" " " "
4 Miss. River R. R. Toll Bridge	Nov. 12, 1892 F.	" " " "
5 Baltimore & Ohio	Dec. 20, 1892 O.&F.	B. & O. R. R. Co
6 Baltimore & Ohio & Chicago	Dec. 20, 1892 F.	" " " "
7 Belt Railway of Chicago	Sept. 19, 1892 O.&F.	Belt Ry. Co. of Chicago
8 Centralia & Chester	Nov. 8, 1892 O.&F.	C. & C. R. R. Co
9 Chicago & Alton	Sept. 24, 1892 O.&F.	C. & A. R. R. Co
10 Jo let & Chicago	Aug. 23, 1892 F.	" " " "
11 Mississippi River Bridge	Aug. 23, 1892 F.	" " " "
12 Chicago & Calumet Terminal	Oct. 24, 1892 O.&F.	C. & C. T. Ry. Co
13 Chicago & Eastern Illinois	Sept. 23, 1892 O.&F.	C. & E. I. R. R. Co
14 Chicago & Western Indiana	Sept. 23, 1892 F.	(¹) " " " "
15 Evansville, Terre Haute & Chi.	Sept. 2, 1892 F.	C. & E. I. R. R. Co
16 Chicago & Erie	Nov. 19, 1892 O.&F.	Chi. & Erie R. R. Co
17 Chicago & Grand Trunk	Sept. 6, 1892 O.&F.	C. & G. T. Ry. Co
18 Grand Trunk Junction	Sept. 6, 1892 F.	" " " "
19 Chicago & Illinois Southern	July 15, 1892 F.	Danville Elevator Co
20 Chicago & Indiana State Line	Oct. 15, 1892 F.	By all R. R. terminating in Chi.
21 Chicago & Northwest	Aug. 31, 1892 O.&F.	C. & N. W. Ry. Co
22 Chicago & Northern Pacific	Nov. 2, 1892 O.&F.	Chi. & Nor. Pac. R. R Co
23 Chicago & Ohio River	Sept. 28, 1892 O.&F.	C. & O. R. R. R. Co
24 Chi. & South Side Rapid Transit(²) ..		
25 Chicago, Burlington & Northern	Oct. 17, 1892 O.&F.	C., B. & N. R. R. Co
26 Chicago, Burlington & Quincy	Oct. 24, 1892 O.&F.	C., B. & Q. R. R. Co
27 Chicago & Iowa	Oct. 24, 1892 O.&F.	" " " "
28 Galesburg & Rio	Oct. 24, 1892 F.	" " " "
29 Illinois Valley & Northern	Oct. 24, 1892 F.	" " " "
30 Liverpool Coal	Nov. 3, 1892 O.&F.	" " " "
31 Quincy, Alton & St. Louis	Oct. 24, 1892 F.	" " " "
32 St. Louis, Rock Island & Chicago	Oct. 24, 1892 F.	" " " "
33 Chicago Central	Nov. 3, 1892	In process of construction
34 Chicago, Milwaukee & St. Paul	Oct. 13, 1892 O.&F.	C., M. & St. P. Ry. Co
35 Chicago, Rock Island & Pacific	Oct. 20, 1892 O.&F.	C., R. I. & P. Ry. Co
36 Peoria & Bureau Valley	July 15, 1892 F.	" " " "
37 Chicago, St. Paul & Kansas City	Sept. 17, 1892 O.&F.	C., St. P., & K. C. Ry. Co
38 Chicago Union Transfer	Oct. 31, 1892	In process of construction
39 Cleveland, Cincinnati, Chi. & St. L.	Oct. 4, 1892 O.&F.	C., C., C. & St. L. Ry. Co
40 Kankakee & Seneca	Oct. 7, 1892 O.&F.	" " " "
41 Peoria & Eastern	Oct. 4, 1892 O.&F.	" " " "
42 DePue, Ladd & Eastern	July 27, 1892 F.	C., B. & Q. R. R. to connect mine
43 East St. Louis & Carondelet	Sept. 5, 1892 O.&F.	E. St. L. & C. Ry. Co
44 East St. Louis Connecting	Sept. 22, 1892 O.&F.	E. St. L. & C. Ry. Co
45 Elgin, Joliet & Eastern	Nov. 3, 1892 O.&F.	E., J. & E. Ry. Co
46 Fulton County Narrow Gauge	Oct. 3, 1892 O.&F.	F. C. N. G. Ry. Co
47 Fulton County Extension	Oct. 3, 1892 F.	" " " "
48 Grand Tower & Cape Girardeau	Oct. 19, 1892 O.&F.	G. T. & C. G. R. R. Co
49 Grand Tower & Carbondale	Oct. 19, 1892 O.&F.	G. T. & C. R. R. Co
50 Illinois Central	Oct. 10, 1892 O.&F.	I. C. R. R. Co
51 Blue Island	Oct. 14, 1892 F.	" " " "
52 Chicago, Havana & Western	Sept. 29, 1892 F.	" " " "
53 Chicago, Madison & Northern	Sept. 29, 1892 F.	" " " "
54 Chicago & Springfield	Sept. 29, 1892 F.	" " " "
55 Dunleith & Dubuque Bridge		" " " "
56 Kankakee & Southwestern	Sept. 29, 1892 F.	" " " "
57 Mound City	Oct. 10, 1892 F.	" " " "
58 Rantoul	Sept. 29, 1892 F.	" " " "
59 South Chicago	Sept. 29, 1892 F.	" " " "
60 St. Charles Air Line(³)	Oct. 10, 1892 F.	" " " "
61 Indiana & Illinois Southern	Oct. 31, 1892 O.&F.	I. & I. S. R. R. Co
62 Indianapolis, Decatur & Western	Oct. 20, 1892 O.&F.	I., D. & W. Ry. trustees 1st mor.
63 Indiana, Illinois & Iowa	Oct. 15, 1892 O.&F.	I., I. & I. R. R. Co
64 Iowa Central	Sept. 26, 1892 O.&F.	Iowa Central Ry. Co
65 Keithsburg Bridge(³)		" " " "
66 Peoria Terminal(³)		" " " "
67 Jacksonville Southeastern Line		J. S. E. Line

(¹) Operated by C. & E. I. R. R.; C. & G. T. Ry.; Wabash R. R.; L., N. A. & C. Ry.; C & E. I. R.; A. T. & S. Fe Ry., and Belt Railway of Chicago.

(²) Owned by M. C., I. C., C. & N. W. and C., B. & Q. Railroads.

(³) Unofficial.

Mileage for year ending June 30, 1892.

4	5	6	7	8	9	10	
LENGTH OF LINE OPERATED—IN MILES.		LENGTH OF LINE OWNED—IN MILES.		Second, third and fourth track in Illinois.	Yard tracks, sidings and spurs in Illinois.	New road built during year in Illinois.	
Whole Line.	In Illinois.	Whole Line.	In Illinois.				
515.27	294.79	.....	.....	.....	.....	.....	1
.....	.....	490.97	277.79	.....	89.64	.....	2
.....	.....	5.20	5.20	3.42	38.43	.....	3
.....	.....	.61	.51	.....	.....	.....	4
282.96	26.27	.....	.....	.....	.....	.....	5
.....	.....	263.58	6.89	6.80	19.83	.98	6
21.31	21.31	.....	.....	1.56	35.14	.....	7
25.00	25.00	25.00	25.00	.....	.50	9.00	8
843.40	580.78	542.25	542.25	42.86	130.93	.....	9
.....	.....	37.20	37.20	40.78	37.07	.....	10
.....	.....	1.33	.65	.....	.....	.....	11
32.50	24.80	32.50	24.80	.....	6.00	.....	12
479.79	243.67	395.50	221.20	37.72	107.67	41.12	13
.....	.....	48.58	48.58	47.81	74.78	.....	14
.....	.....	48.58	5.48	.....	6.39	.....	15
269.56	19.99	249.57	.....	.....	.....	.....	16
335.27	30.65	326.50	21.88	11.50	4.75	.....	17
.....	.....	3.90	3.90	3.90	19.13	.....	18
.....	.....	.41	.41	.....	.10	.....	19
.....	.....	6.10	6.10	.....	.....	.46	20
4,273.54	593.97	3,084.60	593.97	165.79	283.62	.....	21
26.15	26.15	23.55	23.55	17.22	43.17	5.48	22
85.42	85.42	85.42	85.42	.....	4.66	.....	23
.....	.....	3.71	3.71	.....	.....	3.71	24
370.76	109.12	340.23	93.52	.....	17.60	.....	25
5,449.74	1,332.86	4,831.79	802.00	236.44	294.82	.....	26
.....	.....	104.50	104.50	.....	20.30	.....	27
.....	.....	12.22	12.22	.....	1.01	.....	28
.....	.....	58.73	58.73	.....	7.66	.....	29
.....	.....	1.83	1.83	.....	.90	.....	30
.....	.....	46.14	46.14	.....	4.02	.....	31
.....	.....	283.70	283.70	.....	58.59	.....	32
.....	.....	18.10	18.10	.....	18.10	18.10	33
5,759.09	339.15	5,702.31	318.08	60.18	171.61	.....	34
3,474.09	236.18	2,743.75	189.48	195.45	151.31	.....	35
.....	.....	46.70	46.70	.....	10.70	.....	36
922.45	172.16	815.67	146.73	.....	20.90	.....	37
.....	.....	15.36	15.36	18.93	.11	2.39	38
1,587.49	482.75	1,483.12	479.75	2.75	114.42	.....	39
42.08	42.08	42.08	42.08	.....	6.54	.....	40
350.45	131.52	341.43	122.50	.....	32.01	.....	41
.....	.....	3.50	3.50	.....	.47	.....	42
12.01	12.01	12.01	12.01	.....	4.24	.....	43
5.36	5.36	3.36	3.36	.....	19.11	.....	44
180.96	159.66	180.96	159.66	.....	35.35	3.60	45
61.00	61.00	31.00	31.00	.....	2.40	.....	46
.....	.....	30.00	30.00	.....	.....	.....	47
28.80	28.80	28.80	28.80	.....	2.00	.....	48
32.90	32.90	26.20	26.20	.....	6.00	.....	49
2,891.93	1,298.40	705.50	705.50	140.47	282.36	.....	50
.....	.....	3.96	3.96	.....	1.49	3.96	51
.....	.....	131.62	131.62	.....	12.28	.....	52
.....	.....	231.30	139.99	.....	36.95	9.16	53
.....	.....	111.47	111.47	.....	18.54	.....	54
.....	.....	.59	.17	.....	.....	.....	55
.....	.....	131.26	131.26	.....	12.84	.....	56
.....	.....	2.87	2.87	.....	.....	.....	57
.....	.....	74.43	66.21	.....	5.66	.....	58
.....	.....	4.76	4.76	4.76	5.04	.....	59
.....	.....	.76	.76	.76	.....	.....	60
90.00	56.00	90.00	56.00	.....	2.00	.....	61
152.51	75.76	152.51	75.76	.....	8.42	.....	62
170.79	70.65	118.19	68.95	.....	11.71	.....	63
497.60	93.26	502.91	88.66	.....	14.84	.....	64
.....	.....	2.57	1.10	.....	.....	.....	65
.....	.....	1.00	1.00	.....	.....	.....	66
436.13	436.13	.....	.....	.....	2.00	.....	67

Table I.—Classification of Railroads and

	1	2	3
	NAME OF COMPANY.	DATE OF FILING REPORT. (OPERAT- ING OR FINAN- CIAL.)	HOW OPERATED.
68	Chicago, Peoria & St. Louis ⁽¹⁾	Sept. 6, 1892 F.	J. S. E. Line.....
69	Jacksonville, Louisville & St. L. ⁽¹⁾	Sept. 15, 1892 O.&F.	" " ".....
70	Litchfield, Carrollton & West'n ⁽¹⁾	Sept. 13, 1892 O.&F.	" " ".....
71	Louisville & St. Louis ⁽¹⁾	Oct. 7, 1892 O.&F.	" " ".....
72	St. Louis & Chicago.....	Oct. 7, 1892 F.	" " ".....
73	Lake Erie & Western.....	Sept. 28, 1892 O.&F.	L. E. & W. R. R. Co.....
74	Lake Shore & Michigan Southern.....	Sept. 3, 1892 O.&F.	L. S. & M. S. Ry. Co.....
75	Louisville & Nashville.....	Sept. 1, 1892 F.	L. & N. R. R. Co.....
76	Southeast & St. Louis.....	Oct. 3, 1892 O.&F.	" " ".....
77	Louisville, Evan. & St. L., (consol.).....	Sept. 30, 1892 O.&F.	L. F. & St. L. Con. R. R. Co.....
78	Michigan Central.....	Sept. 3, 1892 O.&F.	M. C. R. R. Co.....
79	Joliet & Northern Indiana.....	Sept. 1, 1892 F.	" " ".....
80	Mott's & Ohio.....	Oct. 3, 1892 O.&F.	M. & O. R. R. Co.....
81	St. Louis & Cairo.....	Oct. 3, 1892 F.	" " ".....
82	Nat'l Stock Yards. (East St. L.) ⁽¹⁾	Sept. 30, 1892 O.&F.	N. Y. C. & St. L. R. R. Co.....
83	New York, Chicago & St. Louis.....	Sept. 28, 1892 F.	" " ".....
84	Chicago & State Line.....	Sept. 28, 1892 F.	" " ".....
85	Northern Pacific.....	Oct. 26, 1892	N. P. R. R. Co.....
86	Wisconsin Central Lines.....	Oct. 19, 1892 F.	" " ".....
87	Chicago & Wisconsin.....	Oct. 18, 1892 O.&F.	O. & M. Ry. Co.....
88	Ohio & Mississippi.....	Nov. 3, 1892 O.&F.	Pawnee R. R. Co.....
89	Pawnee.....	Oct. 5, 1892	Penn. Company.....
90	Pennsylvania Co.....	Oct. 5, 1892	In process of construction.....
91	Calumet River.....	Sept. 10, 1892 O.&F.	Penn. Company.....
92	Pittsburgh, Ft. Wayne & Chicago.....	Oct. 5, 1892 O.&F.	" " ".....
93	South Chicago & Southern.....	Dec. 17, 1892 O.&F.	P. & P. U. Ry. Co.....
94	Peoria & Pekin Union.....	Sept. 28, 1892 O.&F.	P. D. & E. Ry. Co.....
95	Peoria, Decatur & Evansville.....	Oct. 5, 1892 O.&F.	P. C. C. & St. L. Ry. Co.....
96	Pittsburgh, Cincinnati, Chi. & St. L.	Oct. 5, 1892 O.&F.	" " ".....
97	Englewood Connecting.....	Sept. 17, 1892 O.&F.	Q., O. & K. C. Ry. (Trustees).....
98	Quincy, Omaha & Kansas City.....	Sept. 26, 1892 O.&F.	R. I. & P. Ry. Co.....
99	Rock Island and Peoria.....	Dec. 26, 1892 O.&F.	St. L., A. & S. R. R. Co. (Receiver).....
100	St. Louis, Alton & Springfield.....	Oct. 17, 1892 O.&F.	St. L., A. & T. H. R. R. Co.....
101	St. Louis, Alton & Terre Haute.....	Nov. 18, 1892 F.	" " ".....
102	Belleville & Carondelet.....	Nov. 18, 1892 F.	" " ".....
103	Belleville & Eldorado.....	Nov. 28, 1892 F.	" " ".....
104	Belleville & Southern Illinois.....	Nov. 18, 1892 F.	" " ".....
105	Chicago, St. Louis & Paducah.....	Sept. 15, 1892 F.	" " ".....
106	St. Louis Southern.....	Sept. 15, 1892 F.	" " ".....
107	Carbondale & Shawneetown.....	Sept. 15, 1892 F.	" " ".....
108	St. Louis & Eastern.....	Oct. 15, 1892 O.&F.	St. L. & E. Ry. Co. (In constr.).....
109	St. Louis & Peoria.....	Oct. 20, 1892 O.&F.	St. Louis & Peoria R. R. Co.....
110	Terminal R. R. Ass'n of St. Louis.....	Sept. 30, 1892 F.	Ter. R. R. Ass'n of St. Louis.....
111	St. Louis Bridge.....	Nov. 16, 1892 O.&F.	T. H. & I. R. R. Co.....
112	Terre Haute & Indianapolis.....	Sept. 5, 1892 F.	" " ".....
113	St. Louis, Vandalia & Terre Haute.....	Nov. 28, 1892 O.&F.	T. H. & P. R. R. Co.....
114	Terre Haute & Peoria.....	Sept. 13, 1892 O.&F.	T. P. & W. Ry. Co.....
115	Toledo, Peoria & Western.....	Oct. 15, 1892 O.&F.	T. S. L. & K. C. R. R. Co.....
116	Toledo, St. Louis & Kansas City.....	Sept. 20, 1892 O.&F.	Wabash R. R. Co.....
117	Union Stock Yards & Transit.....	Sept. 1, 1892 O.&F.	W., C. & W. R. R. Co.....
118	Wabash.....		
119	Champaign & Sidney ⁽¹⁾		
120	Louisiana & Pike County ⁽¹⁾		
121	Wabash, Chester & Western.....		
	Totals.....		

⁽¹⁾ Unofficial.

Mileage for year ending June 30, 1892.—Concluded.

4		5		6		7		8		9		10	
LENGTH OF LINE OPER- ATED—IN MILES.		LENGTH OF LINE OWNED —IN MILES.						Second, third and fourth tracks in Illinois.		Yard tracks, sidings and spurs in Illinois.		New road built during year in Illinois.	
Whole Line.	In Illinois.	Whole Line.	In Illinois.										
		167.50	167.50							20.61			68
		112.30	112.30							10.82			69
		51.60	51.60							4.07			70
		16.47	16.47							.88			71
		50.46	50.46							3.57			72
		710.78	118.69							17.84			73
		1,122.63	14.02					7.64		59.64			74
													75
		208.14	179.81							31.03			76
		359.85	150.27							25.68			77
		270.07	6.07					6.07		46.40			78
		45.00	29.00							16.80			79
		160.60	160.60										80
		160.60	160.60							40.29			81
										15.00			82
		508.11											83
		9.96	9.96					1.31		18.13			84
													85
													86
		45.66	45.66										87
		635.92	375.52							16.39			88
		9.00	9.00							65.27			89
										.50	4.89		90
		4.43	4.43							.10			91
		469.89	16.32					14.75		51.80			92
		10.25	10.25							2.33			93
		18.01	18.01					2.00		33.08			94
		233.27	195.55							26.51			95
		1,082.09	27.99					11.74		35.53			96
		2.35	2.35							.82			97
		134.51											98
		113.00	113.00							19.94			99
		85.80	85.80							5.40			100
		14.40	14.40							24.48			101
		17.30	17.30							2.20			102
		50.20	50.20							3.70			103
		56.40	56.40							13.10			104
		53.50	53.50							6.84			105
		29.74	29.74							3.92			106
		17.50	17.50							3.60			107
		1.50	1.50							2.00	.50		108
		14.00	14.00							1.00			109
		3.51	1.52			1.35	.67			13.63			110
			1.22				.85						111
		158.34	158.34										112
		158.34	158.34							52.97			113
		144.74	144.74							13.07			114
		230.10	230.10							36.10			115
		450.72	179.49							24.81			116
		16.78	16.78							79.56			117
		1,443.50	659.60							153.00			118
		11.70	11.70										119
		6.10	6.10										120
		42.26	42.26							3.07			121
			10,276.19					1,082.61		3,319.08			102.89

TABLE II.—*Railway Capital at the close*

1	2	3	4	5	6	7
NAME OF COMPANY.	STOCKS.			FUNDED		
	Amount outstanding.	Am't unt per mile of line.	Proportion to total railway capital. 100×Col. 2÷Col. 15.	Amount outstanding Cols. 8+9+10+11.	Am't unt per mile of line.	Proportion to total railway capital. 100×Col. 5÷Col. 15.
1 Atchison, Topeka & Santa Fe (1)....	\$15,000,000	\$30,552	46.03	\$17,583,000	\$35,813	53.97
2 Chicago, Santa Fe & California....	5,000,000	961,538	40.81	7,000,000	1,346,154	57.13
3 Atchison, Top. & Santa Fe in Chi.	1,000,000	1,639,344	60.60	650,000	1,065,574	39.40
4 Mississippi R. Railroad Toll B'dge						
5 Baltimore & Ohio (1).....						
6 Baltimore & Ohio & Chicago.....	1,503,450	5,704	7.71	7,744,000	29,380	39.73
7 Belt Railway of Chicago.....	1,200,000	56,312	84.82			
8 Chicago & Alton.....	17,594,500	32,447	56.62	12,336,850	22,751	39.70
9 Chicago & Joliet.....	1,500,000	40,323	100.00			
10 Joliet & Chicago.....	300,000	225,564	33.33	600,000	451,128	66.67
11 Mississippi River Bridge.....	5,000,000	153,846	71.44	1,752,000	53,908	25.10
12 Chicago & Calumet Terminal.....	12,576,700	31,799	41.69	17,004,000	42,994	56.34
13 Chicago & Eastern Illinois.....	5,000,000	102,923	33.24	3,573,667	197,070	63.65
14 Chicago & Western Indiana.....	581,370	11,967	31.58	1,250,000	25,731	61.49
15 Evansville, Terre Haute & Chic...	100,000	401	.43	22,557,421	90,385	97.87
16 Chicago & Erie.....	6,600,000	20,214	32.28	12,000,000	36,753	58.70
17 Chicago & Grand Trunk.....	500,000	128,205	11.63	3,591,280	920,841	83.57
18 Grand Trunk Junction.....	500	1,220	100.00			
19 Chicago & Illinois Southern.....	200,000	32,787	37.77			
20 Chicago & Indiana State Line.....	66,290,821	15,514	36.10	114,364,500	26,764	62.28
21 Chicago & Northwestern.....	30,000,000	1,147,227	52.95	25,959,000	992,696	45.82
22 Chicago & Northern Pacific.....	438,800	5,137	31.97	901,780	10,557	65.70
23 Chicago & Ohio River.....	9,477,500	27,248	41.28	12,612,500	36,261	55.52
24 Chicago, Burlington & Northern...	76,397,400	15,812	39.13	114,580,980	23,714	58.70
25 Chicago, Burlington & Quincy.....	1,428,000	13,731	35.54	2,150,000	20,673	57.54
26 Chicago & Iowa.....	240,000	19,643	49.60	243,800	19,954	50.40
27 Galesburg & Rio.....	1,500,000	25,539	56.32	1,163,200	19,805	43.68
28 Illinois Valley & Northern.....	25,000	9,158	100.00			
29 Liverpool Coal.....	970,100	21,025	53.59	840,000	18,206	46.41
30 Quincy, Alton & St. Louis.....	3,000,000	10,575	54.54	2,500,000	8,812	45.46
31 St. Louis, Rock Island & Chicago	70,392,161	12,345	34.10	129,195,000	22,657	62.60
32 Chicago, Milwaukee & St. Paul.....	46,156,000	16,822	45.50	53,629,000	19,546	52.87
33 Chicago, Rock Island & Pacific.....	1,500,000	32,120	100.00			
34 Peoria & Bureau Valley.....	14,892,900	18,258	30.17	33,485,281	41,053	67.85
35 Chicago, St. Paul & Kansas City...	38,407,722	24,644	44.94	44,101,730	28,297	51.61
36 Cleveland, Cincin., Chicago & St. L.	10,000	238	.96	4,050,000	15,446	61.90
37 Kankakee & Seneca.....	10,000,000	29,249	42.01	13,603,000	33,841	57.15
38 Peoria & Eastern.....	30,000	8,571	100.00			
39 De Pue, Laid & Eastern.....	420,000	34,971	66.86	200,000	16,653	31.84
40 East St. Louis & Carondelet.....	20,000	5,952	4.98			
41 East St. Louis Connecting.....	6,000,000	33,157	50.70	5,589,000	30,885	47.23
42 Elgin, Joliet & Eastern.....	375,894	12,126	41.54	171,000	5,516	18.89
43 Fulton County Narrow Gauge.....	260,900	8,646	45.30	313,000	10,433	54.70
44 Fulton County Extension.....	350,000	12,153	44.71	350,000	12,153	44.71
45 Grand Tower & Cape Girardeau...	50,000	1,908	50.09			
46 Grand Tower & Carbondale.....	45,000,000	27,731	52.94	36,984,000	22,794	43.51
47 Illinois Central.....	25,000	6,313	20.00	100,000	25,253	80.00
48 Blue Island.....						
49 Chicago, Havana & Western.....	50,000	216	.83	2,500,000	10,808	40.79
50 Chicago, Madison & Northern.....						
51 Chicago & Springfield.....						
52 Kankakee & Southwestern.....						
53 Rantoul.....						
54 South Chicago.....				200,000	42,017	100.00
55 Indiana & Illinois Southern.....	1,400,000	15,555	48.69	1,239,000	13,766	43.09
56 Indianapolis, Decatur & Western ..	1,000,000	6,557	19.09	4,218,950	27,663	73.21
57 Indiana, Illinois & Iowa.....	3,597,800	30,441	70.16	1,408,513	11,917	27.47
58 Iowa Central.....	13,750,685	27,342	66.80	6,438,360	12,802	31.27

(1) Inserted to show relation of following subsidiary lines.

of the year ending June 30, 1892.

8	9	10	11	12	13	14	15	16	
DEBT.				OTHER FORMS OF IN-DEBTEDNESS.		SUMMARY.			
DESIGNATION.				Amount outstanding.	Amount per mile of line.....	Proportion to total railway capital, 100×Col. 12÷Col. 15	Total railway capital, Cols. 2+5+12	Amount per mile of line, Cols. 3+6+13.	
Bonds.	Miscellaneous obligations.	Income bonds.	Equipment trust obligations.						
\$17,583,000							\$32,583,000	\$66,365	1
7,000,000				\$250,740	\$48,219	2.06	12,250,740	2,355,911	3
650,000							1,650,000	2,704,918	4
7,744,000				10,243,896	38,864	52.56	19,491,316	73,948	5
12,336,850				214,607	10,071	15.18	1,414,607	66,383	6
				1,140,812	2,104	3.68	31,072,162	57,302	7
600,000							1,500,000	40,323	10
1,752,000				226,427	6,967	3.26	900,000	676,692	11
16,961,000	\$42,000	\$1,000		579,615	1,463	1.97	6,378,427	214,721	12
9,573,667				465,422	958	3.11	30,160,345	76,256	13
1,250,000				20,630	424	1.13	15,039,089	300,951	14
12,000,000	300,000	10,000,000	\$257,421	390,298	1,564	1.70	1,852,000	38,122	15
12,000,000				1,841,967	5,642	9.02	23,047,719	92,350	16
3,591,280				205,696	52,742	4.80	20,441,967	62,609	17
							4,296,976	1,101,788	18
							500	1,220	19
60,882,500	153,482,000			329,366	53,933	62.23	529,366	86,780	20
25,959,000				2,951,883	691	1.62	183,607,204	42,969	21
283,480		618,300		693,145	26,506	1.23	56,652,145	2,166,430	22
12,612,500				32,169	377	2.33	1,372,749	16,068	23
114,580,980				623,503	1,793	3.20	22,713,503	65,302	25
2,150,000				4,213,251	796	2.17	195,191,631	40,322	26
243,800				158,370	1,516	6.92	3,736,370	35,920	27
1,163,200							483,800	39,597	28
							2,663,200	45,344	29
840,000							25,000	9,153	30
2,500,000							1,810,100	39,231	31
122,262,000	4,973,000	1,960,000		6,788,301	1,190	3.30	5,500,000	19,387	32
50,629,000	3,000,000			1,642,008	598	1.63	306,375,462	36,192	34
							101,427,008	36,966	35
23,837,000	2,943,150	4,981,700	1,723,431	971,686	1,191	1.98	1,500,000	32,120	36
44,101,730				2,936,601	1,884	3.45	49,349,867	60,502	37
60,000				390,000	9,268	37.14	85,446,053	54,825	39
9,603,000		4,000,000		199,062	583	.84	1,050,000	24,952	40
							23,802,063	69,713	41
200,000							30,000	8,571	42
				8,102	674	1.30	628,102	52,298	43
5,589,000				381,817	113,634	95.02	401,817	119,586	44
171,000				244,606	1,352	2.07	11,833,606	65,394	45
313,000				357,987	11,815	39.57	904,880	29,190	46
350,000							573,900	19,130	47
				82,726	2,872	10.58	782,726	27,178	48
13,717,000	23,267,000			49,806	1,901	49.91	99,806	3,809	49
100,000				3,007,740	1,854	3.55	84,991,740	52,382	50
							125,000	31,566	51
2,500,000				50,489	384	100.00	50,489	384	52
				3,577,582	15,467	58.38	6,127,582	26,491	53
				288,389	2,588	100.00	288,389	2,588	54
				75,999	578	100.00	75,999	578	56
				28,115	378	100.00	28,115	378	58
200,000							200,000	42,017	59
500,000		739,000		235,991	2,623	8.22	2,874,991	31,944	61
3,423,950		795,000		543,076	3,561	7.70	5,762,026	37,781	62
800,600		500,000	108,513	121,114	1,025	2.37	5,127,427	43,383	63
6,324,077			114,283	395,753	787	1.93	20,584,798	40,831	64

(1) Includes \$20,000.00 debenture bonds.

Table II—Railway Capital at the close

	1	2	3	4	5	6	7
	STOCKS.			FUNDED			
NAME OF COMPANY.	Amount outstanding.	Am't per mile of line.	Proportion to total railway capital, 100×Col. 2÷Col. 15.	Amount outstanding Cols. 8+9+10+11.	Am't per mile of line.	Proportion to total railway capital, 100×Col. 5÷Col. 15.	
73 Lake Erie & Western	\$23,680,000	\$33,816	71.65	\$8,750,000	\$12,310	26.48	
74 Lake Shore & Michigan Southern..	50,000,000	58,197	50.25	45,516,000	40,544	45.74	
75 Louisville & Nashville ⁽¹⁾							
76 Southeast & St. Louis	1,000,000	4,805	13.33	6,500,000	31,229	86.67	
77 Louisville, Evansville & St. L. Con.	5,985,609	14,133	34.54	8,333,862	23,169	56.60	
78 Michigan Central.....	18,738,204	69,383	62.31	10,000,000	37,027	33.25	
79 Joliet & Northern Indiana.....	300,000	6,667	27.26	800,000	17,788	72.70	
80 Mobile & Ohio ⁽¹⁾							
81 St. Louis & Cairo.....	6,500,000	40,473	61.13	4,000,000	24,907	37.62	
83 New York, Chicago & St. Louis....	30,000,000	59,042	59.46	19,575,000	38,525	38.80	
84 Chicago & State Line.....	1,500,000	150,602	100.00				
85 Northern Pacific ⁽¹⁾							
86 Wisconsin Central Lines ⁽¹⁾							
87 Chicago & Wisconsin.....	1,500,000	32,852	50.00	1,500,000	32,852	50.00	
88 Ohio & Mississippi	24,086,660	37,877	57.86	16,450,000	25,868	39.51	
89 Pawnee.....	50,000	5,556	58.13	35,000	4,000	41.87	
90 Pennsylvania Co. ⁽¹⁾							
91 Calumet River	65,500	14,786	45.01				
92 Pittsburgh, Ft. Wayne & Chicago.	34,088,575	72,529	72.19	12,410,000	26,404	26.27	
93 South Chicago & Southern	127,000	12,390	45.14				
94 Peoria & Pekin Union	1,000,000	55,525	24.41	2,994,000	166,241	73.10	
95 Peoria, Decatur & Evansville	8,490,000	36,010	60.50	4,903,399	21,020	35.31	
96 Pittsburgh, Cin., Chicago & St. L..	47,966,691	44,328	51.17	42,412,370	39,195	45.24	
97 Englewood Connecting	98,500	41,915	95.77				
98 Quincy, Omaha & Kansas City.....	1,623,240	12,068	47.85	1,739,240	12,930	51.27	
99 Rock Island & Peoria.....	1,500,000	13,274	62.23	600,000	5,310	27.69	
101 St. Louis, Alton & Terre Haute....	3,470,800	16,767	27.17	8,057,000	38,923	63.07	
102 Belleville & Carondelet	500,000	28,902	50.76	485,000	28,034	49.24	
103 Belleville & Eldorado	1,000,000	19,920	64.51	550,000	10,956	35.49	
104 Belleville & Southern Illinois	1,692,000	30,609	62.60	1,611,000	17,925	37.40	
105 Chicago, St. Louis & Paducah.....	1,000,000	18,692	33.33	2,000,000	37,383	66.67	
106 St. Louis Southern.....	500,000	16,812	31.74	1,075,000	35,810	68.26	
107 Carbondale & Shawneetown	356,600	20,377	58.78	250,000	14,286	41.22	
109 St. Louis & Peoria	280,000	20,000	45.20	220,445	15,746	35.59	
110 Terminal Rail'd Ass'n of St. Louis.	1,441,200	1,067,556	15.42	7,000,000	5,185,185	74.93	
111 St. Louis Bridge.....	7,990,000	6,549,180	60.95	5,000,000	4,098,361	38.14	
112 Terre Haute & Indianapolis ⁽¹⁾							
113 St. Louis, Vandalia & Terre Haute	3,924,058	24,789	46.22	4,499,000	28,421	52.99	
114 Terre Haute & Peoria.....	5,400,000	37,500	74.61	1,800,000	12,500	24.87	
115 Toledo, Peoria & Western	4,076,900	17,718	44.56	4,935,000	21,447	53.94	
116 Toledo, St. Louis & Kansas City...	17,055,000	37,539	64.43	9,000,000	19,968	31.00	
118 Wabash	52,000,000	36,024	39.34	78,000,000	50,489	58.89	
121 Wabash, Chester & Western	250,000	5,916	41.71	500,000	7,099	50.05	
Totals.....	\$875,359,740	\$24,532	44.26	\$1,034,036,659	\$28,854	52.79	

(1) Inserted to show relation of following subsidiary lines.

of the year ending June 30, 1892—Concluded.

8	9	10	11	12	13	14	15	16
DEBT.				OTHER FORMS OF IN-DEBTEDNESS.			SUMMARY.	
DESIGNATION.				Amount outstanding.	Amount per mile of line	Proportion to total railway capital. $100 \times \text{Col. 12} \div \text{Col. 15}$.	Total railway capital. Cols. 2+5+12	Amount per mile of line. Cols. 3+6+13.
Bonds.	Miscellaneous obligations.	Income bonds.	Equipment trust obligations.					
\$8,750,000				\$615,286	\$866	1.87	\$33,045,286	\$46,492
45,516,000				3,978,377	3,544	4.01	99,494,377	95,392
6,500,000							7,580,000	36,034
8,165,875			\$167,987	1,303,893	3,623	8.86	14,723,364	40,925
10,000,000				1,334,791	4,943	4.44	30,072,995	111,353
800,000				360	8	.04	1,100,360	24,452
4,000,000				132,414	825	1.25	10,632,414	66,204
19,575,000				871,256	1,715	1.74	50,446,256	99,282
							1,500,000	150,602
				1,102,413	1,277	100.00	1,102,413	1,277
1,100,000		\$100,000					3,000,000	65,704
15,976,000			474,000	1,087,987	1,711	2.63	41,624,647	65,456
36,000							86,000	9,556
				80,614	18,196	54.99	146,114	32,982
12,410,000				724,676	1,542	1.54	47,223,251	100,475
				154,291	15,053	54.86	281,291	27,443
2,994,000				101,386	5,629	2.49	4,095,386	227,395
4,845,000			58,330	580,084	2,487	4.19	13,883,414	59,517
41,836,000			576,370	3,358,433	3,104	3.59	93,737,494	86,626
				4,316	1,850	4.23	102,846	43,765
1,739,210				29,454	219	.88	3,391,934	25,217
600,000				66,600	590	10.08	2,166,600	19,174
6,700,000		1,357,000		1,246,021	5,213	9.76	12,773,821	60,903
485,000							985,000	56,936
550,000							1,550,000	30,876
1,011,000							2,703,000	47,934
2,000,000							3,000,000	56,075
1,075,000							1,575,000	32,622
250,000							606,600	34,663
182,000			38,445	118,890	8,492	19.21	619,335	44,239
7,000,000				900,402	666,965	9.65	9,341,602	6,919,705
5,000,000				119,700	98,115	.91	13,109,700	10,745,656
4,499,000				66,465	420	.79	8,489,523	52,629
1,800,000				38,315	266	.52	7,238,315	50,266
4,800,000	\$135,000			136,623	594	1.50	9,148,523	39,759
9,000,000				411,631	913	1.57	26,466,631	58,720
48,003,000	230,000,000			2,430,998	4,573	1.77	132,430,998	88,086
300,000				49,308	1,167	8.24	599,308	14,182
\$887,023,129	\$118,142,150	\$15,352,000	\$3,518,780	\$68,003,791	\$1,873	2.95	\$1,977,399,590	\$55,259

(1) Debenture bonds.

TABLE III.—*Income Account—Whole Line—*

	1	2	3
	NAME OF COMPANY.	Gross earnings from operation.	Operating expenses.
1	Atehison, Topeka & Santa Fe (1) .....	.....	.....
2	Chicago, Santa Fe & California	\$6,105,100	\$4,611,652
5	Baltimore & Ohio	2,909,993	2,400,520
7	Belt Railway of Chicago	790,290	520,360
8	Centralia & Chester	11,391	12,964
9	Chicago & Alton	8,226,621	5,054,970
10	Joliet & Chicago .....	.....	.....
11	Mississippi River Bridge .....	.....	.....
12	Chicago & Calumet Terminal	176,720	154,165
13	Chicago & Eastern Illinois	3,780,275	2,389,014
14	Chicago & Western Indiana .....	.....	.....
15	Evansville, Terre Haute & Chicago .....	.....	.....
16	Chicago & Erie	2,886,582	2,715,766
17	Chicago & Grand Trunk	4,016,605	2,938,501
18	Grand Trunk Junction .....	.....	.....
20	Chicago & Indiana State Line .....	.....	.....
21	Chicago & Northwestern	32,064,757	19,768,752
22	Chicago & Northern Pacific	960,967	161,538
23	Chicago & Ohio River	81,712	55,558
25	Chicago, Burlington & Northern	2,237,923	1,493,180
26	Chicago, Burlington & Quincy	31,223,850	19,857,726
27	Chicago & Iowa	298,938	149,524
28	Galesburg & Rio .....	.....	.....
29	Illinois Valley & Northern .....	.....	.....
30	Liverpool Coal .....	.....	.....
31	Quincy, Alton & St. Louis .....	.....	.....
32	St. Louis, Rock Island & Chicago .....	.....	.....
34	Chicago, Milwaukee & St. Paul	32,419,305	20,017,654
35	Chicago, Rock Island & Pacific	19,096,644	12,949,264
36	Peoria & Bureau Valley .....	.....	.....
37	Chicago, St. Paul & Kansas City	4,950,114	3,329,874
39	Cleveland, Cincinnati, Chicago & St. Louis	13,818,115	9,736,624
40	Kankakee & Seneca	79,550	66,804
41	Peoria & Eastern	1,842,635	1,300,504
42	De Pue, Ladd & Eastern .....	.....	.....
43	East St. Louis & Carondelet	78,215	69,553
44	East St. Louis Connecting	150,293	172,307
45	Elgin, Joliet & Eastern	815,134	518,532
46	Fulton County Narrow Gauge	56,547	52,866
48	Grand Tower & Cape Girardeau	48,245	42,187
49	Grand Tower & Carbondale	136,161	72,067
50	Illinois Central	19,198,495	13,048,510
52	Chicago, Havana & Western .....	.....	.....
58	Rantoul .....	.....	.....
59	South Chicago .....	.....	.....
61	Indiana & Illinois Southern	91,202	72,771
62	Indianapolis, Decatur & Western	511,987	381,440
63	Indiana, Illinois & Iowa	601,306	433,814
64	Iowa Central	1,888,260	1,374,005
72	St. Louis & Chicago .....	.....	.....
73	Lake Erie & Western	3,247,447	1,764,658
74	Lake Shore & Michigan Southern	22,559,994	14,928,377
75	Louisville & Nashville	1,284,757	814,510
77	Louisville, Evansville & St. Louis, Consolidated	1,409,339	1,055,782
79	Michigan Central	15,920,320	11,462,434
79	Joliet & Northern Indiana .....	.....	.....
80	Mobile & Ohio	806,781	607,641
83	New York, Chicago & St. Louis	6,297,362	5,161,754
84	Chicago & State Line .....	.....	.....
85	Northern Pacific (1) .....	.....	.....
86	Wisconsin Central Lines	5,543,964	3,496,237
88	Ohio & Mississippi	4,228,403	3,043,184
89	Pawnee	6,871	11,769

(1) Inserted to show relation of following subsidiary lines.

for year ending June 30, 1892.

4	5	6	7	8	9	
Income from operation. Col. 2—Col. 3.	INCOME FROM PROPERTY OWNED.				Total income, Col. 4+8.	
	SOURCE OF INCOME.			Total income from property described. Cols. 5+6+7.		
	Stocks.	Bonds.	Miscellaneous, including rents.			
.....	.....	.....	.....	.....	.....	1
\$1,493,448	.....	.....	.....	.....	\$1,493,448	2
509,433	.....	.....	.....	.....	509,433	5
269,929	.....	.....	.....	.....	269,929	7
(¹) 1,563	.....	.....	.....	.....	(¹) 1,563	8
3,271,650	\$32,032	\$232,810	.....	\$272,068	3,543,719	9
.....	.....	.....	\$7,226	105,750	105,750	10
.....	.....	.....	71,000	71,000	71,000	11
22,555	.....	.....	377	377	22,932	12
1,391,261	45,000	1,025	18,209	64,234	1,455,496	13
.....	.....	.....	932,672	932,672	932,672	14
.....	.....	.....	75,000	75,000	75,000	15
170,815	45,000	6,880	.....	51,880	222,695	16
1,078,103	.....	.....	97,381	97,381	1,175,485	17
.....	.....	.....	179,564	179,564	179,564	18
.....	.....	.....	21,825	21,825	21,825	20
12,296,205	270,092	521	46,263	316,877	12,613,082	21
799,428	.....	.....	86,650	86,650	886,079	22
26,153	.....	.....	.....	.....	26,153	23
744,742	3,125	.....	.....	3,125	747,867	25
11,366,123	949,56	290,900	.....	1,397,204	12,763,328	26
149,413	.....	.....	156,847	99,243	248,656	27
.....	.....	.....	99,243	16,999	16,999	28
.....	.....	.....	16,999	80,115	80,115	29
.....	.....	.....	80,115	21,143	21,143	30
.....	.....	.....	21,143	42,000	42,000	31
.....	.....	.....	42,000	228,110	228,110	32
12,401,651	68,131	13,328	228,110	237,353	12,639,005	34
6,147,380	95,753	.....	237,353	225,114	6,572,494	35
.....	.....	.....	225,114	125,000	125,000	36
1,020,239	6,024	.....	125,000	6,024	1,026,263	37
4,081,491	19,556	.....	.....	25,191	4,106,682	39
12,726	.....	.....	5,634	.....	12,726	40
542,130	.....	.....	.....	2,884	542,130	41
.....	.....	.....	2,884	.....	2,884	42
8,662	.....	.....	.....	.....	8,662	43
(¹) 22,013	.....	.....	.....	.....	(¹) 22,013	44
296,601	.....	.....	.....	.....	296,601	45
3,681	.....	.....	.....	.....	3,681	46
6,057	.....	.....	992	992	7,050	48
64,093	.....	.....	.....	.....	64,093	49
6,149,985	225,599	778,543	61,037	1,065,181	7,215,166	50
.....	.....	4,075	34,957	39,032	39,032	52
.....	.....	5,900	10,776	16,676	16,676	58
.....	.....	.....	25,649	25,649	25,649	59
18,430	.....	.....	.....	.....	18,430	61
130,547	.....	.....	2,108	2,108	132,655	62
167,492	.....	.....	.....	.....	167,492	63
514,254	.....	.....	14,270	14,270	528,524	64
.....	.....	.....	39,999	39,999	39,999	72
1,482,788	.....	.....	.....	.....	1,482,788	73
7,631,617	320,166	41,860	233,972	595,999	8,227,617	74
470,246	.....	.....	.....	.....	470,246	75
353,557	.....	7,950	23,812	31,762	385,319	77
4,457,886	41,850	2,620	1,141	45,611	4,503,498	78
.....	.....	.....	89,019	89,019	89,019	79
199,139	.....	.....	.....	.....	199,139	80
1,135,607	.....	1,360	10,895	12,255	1,147,863	83
.....	.....	.....	100	100	100	84
.....	.....	.....	.....	.....	.....	85
2,047,726	.....	.....	.....	.....	2,047,726	86
1,185,219	.....	.....	.....	.....	1,185,219	88
(¹) 4,898	.....	.....	.....	.....	(¹) 4,898	89

(¹) Deficit.

TABLE III.—*Income Account—Whole Line—*

	1	2	3
	NAME OF COMPANY.	Gross earnings from operation.	Operating expenses.
90	Pennsylvania Co. (4).....		
92	Pittsburgh, Ft. Wayne & Chicago (O & F).....	\$12,472,271	\$8,173,551
92	Pittsburgh, Ft. Wayne & Chicago (F).....		
93	South Chicago & Southern (O & F).....	31,427	23,114
93	South Chicago & Southern (F).....		
94	Peoria & Pekin Union.....	598,086	395,384
95	Peoria, Decatur & Evansville.....	829,221	460,537
96	Pittsburgh, Cincinnati, Chicago & St. Louis.....	15,642,588	11,293,079
97	Englewood Connecting (O & F).....	4,045	1,988
97	Englewood Connecting (F).....		
98	Quincy, Omaha & Kansas City.....	252,643	174,188
99	Rock Island & Peoria.....	760,836	414,669
100	St. Louis, Alton & Springfield.....	135,467	105,903
101	St. Louis, Alton & Terre Haute.....	1,480,929	836,332
102	Belleville & Carondelet.....		
103	Belleville & Eldorado.....		
104	Belleville & Southern Illinois.....		
105	Chicago, St. Louis & Paducah.....		
106	St. Louis Southern.....		
107	Carbondale & Shawneetown.....		
109	St. Louis & Peoria.....	29,873	18,893
110	Terminal Railroad Association of St. Louis.....	1,748,083	737,381
111	St. Louis Bridge.....		
112	Terre Haute & Indianapolis.....	1,869,191	1,236,571
113	St. Lou's, Vandalia & Terre Haute.....		
114	Terre Haute & Peoria.....	379,290	273,842
115	Toledo, Peoria & Western.....	1,017,791	735,186
116	Toledo, St. Louis & Kansas City.....	2,078,416	1,523,601
118	Wabash.....	14,889,531	10,832,526
121	Wabash, Chester & Western.....	74,914	49,957
	Total.....	\$306,618,011	\$206,049,930

(4) Inserted to show relation of subsidiary lines.

for year ending June 30, 1892—Continued.

4	5	6	7	8	9	
Income from operation. Col. 2—Col. 3.	INCOME FROM PROPERTY OWNED.				Total income, Cols. 4+8.	
	SOURCE OF INCOME.			Total income from property described. Cols. 5+6+7.		
	Stocks.	Bonds.	Miscellaneous, including rents.			
.....	90
4,298,719	4,298,719	92
.....	64,451	355,093	3,376,951	3,796,495	3,796,495	92
8,313	8,313	93
.....	5,674	5,674	5,674	93
202,701	202,701	94
368,683	5,000	.....	2,594	7,594	376,278	95
4,349,509	2,983	.....	629,666	632,650	4,982,159	96
2,056	2,056	97
.....	138	138	138	97
78,455	78,455	98
346,166	600	.....	13,826	14,426	360,593	99
29,563	29,563	100
644,596	340,520	89,276	429,796	1,074,393	101
.....	30,000	30,000	30,000	102
.....	18,386	18,386	18,386	103
.....	218,022	218,022	218,022	104
.....	60,390	60,390	60,390	105
.....	75,650	75,650	75,650	106
.....	10,000	10,000	10,000	107
10,980	10,980	109
1,010,702	227,448	227,448	1,238,150	110
.....	591,900	591,900	591,900	111
632,620	632,620	112
.....	584,805	584,805	584,805	113
105,387	105,387	114
282,604	2,776	2,776	285,381	115
554,815	554,815	116
3,556,804	127,600	2,700	258,318	388,618	3,945,422	118
24,956	24,956	121
\$100,568,081	\$2,322,422	\$2,086,086	\$9,449,717	\$13,858,227	\$114,426,308	

TABLE III.—Income Account—

NAME OF COMPANY.	10	11
	EXPENDITURES	
	DESIG—	
	Interest on funded debt, accrued.	Interest on interest bear- ing current liabilities, accrued, not otherwise provided for.
1 Atchison, Topeka & Santa Fe ⁽¹⁾		
2 Chicago, Santa Fe & California.....	\$901,480	
5 Baltimore & Ohio.....	464,640	
7 Belt Railway of Chicago.....		\$4,375
8 Centralia & Chester.....		
9 Chicago & Alton.....	805,385	
10 Joliet & Chicago.....		
11 Mississippi River Bridge.....	36,000	
12 Chicago & Calumet Terminal.....	87,600	
13 Chicago & Eastern Illinois.....	837,340	
14 Chicago & Western Indiana.....	550,848	
15 Evansville, Terre Haute & Chicago.....	75,000	
16 Chicago & Erie.....	805,810	8,497
17 Chicago & Grand Trunk.....	659,991	90,108
18 Grand Trunk Junction.....	179,564	
20 Chicago & Indiana State Line.....		16,066
21 Chicago & Northwestern.....	6,059,147	
22 Chicago & Northern Pacific.....	1,167,416	
23 Chicago & Ohio River.....	4,802	185
25 Chicago, Burlington & Northern.....	685,600	
26 Chicago, Burlington & Quincy.....	6,003,376	
27 Chicago & Iowa.....	160,009	9,422
28 Galesburg & Rio.....	14,628	
29 Illinois Valley & Northern.....	69,792	
30 Liverpool Coal.....		
31 Quincy, Alton & St. Louis.....	42,000	
32 St. Louis, Rock Island & Chicago.....	175,000	
34 Chicago, Milwaukee & St. Paul.....	7,161,736	112,414
35 Chicago, Rock Island & Pacific.....	2,871,786	
36 Peoria & Bureau Valley.....		
37 Chicago, St. Paul & Kansas City.....	241,954	
39 Cleveland, Cincinnati, Chicago & St. Louis.....	2,293,642	42,162
40 Kankakee & Seneca.....	39,000	
41 Peoria & Eastern.....	419,120	
42 DePue, Ladd & Eastern.....		
43 East St. Louis & Carondelet.....	14,000	
44 East St. Louis Connecting.....	19,914	
45 Elgin, Joliet & Eastern.....	278,900	8,821
46 Fulton County Narrow Gauge.....	33,880	
48 Grand Tower & Cape Girardeau.....	21,000	35
49 Grand Tower & Carbondale.....		573
50 Illinois Central.....	1,459,925	59,839
52 Chicago, Havana & Western.....	125,000	
58 Rantoul.....	50,000	
59 South Chicago.....	10,000	
61 Indiana & Illinois Southern.....		1,253
62 Indianapolis, Decatur & Western.....	132,880	
63 Indiana, Illinois & Iowa.....	59,513	
64 Iowa Central.....	315,502	15,920
72 St. Louis & Chicago.....		
73 Lake Erie & Western.....	398,437	
74 Lake Shore & Michigan Southern.....	3,196,127	
75 Louisville & Nashville.....	300,000	
77 Louisville, Evansville & St. Louis, Consolidated.....	453,535	36,166
78 Michigan Central.....	1,067,800	
79 Joliet & Northern Indiana.....	56,000	
80 Mobile & Ohio.....	160,000	
83 New York, Chicago & St. Louis.....	778,900	
84 Chicago & State Line.....		
85 Northern Pacific ⁽¹⁾		
86 Wisconsin Central Lines.....		

⁽¹⁾ Inserted to show relation of subsidiary lines.

Whole Line.—Continued.

12	13	14	15	16	17	
ASSIGNABLE TO FIXED CHARGES.						
NATION.			Total fixed charges, Cols. 10+11+12 +13+14.	Net income, Cols. 9—15.	Net deficit, Cols. 9—15.	
Rents.	Taxes.	Miscellaneous				
.....	\$161,575	\$109,962	\$1,173,017	\$320,430	.....	1
.....	67,778	.....	532,418	.....	22,985	2
\$112,344	33,300	.....	150,020	119,908	.....	5
.....	752	.....	752	.....	2,315	7
674,722	268,767	.....	1,748,875	1,794,844	.....	8
.....	.....	750	750	105,000	.....	9
.....	8,031	.....	36,000	35,000	.....	10
.....	.....	.....	95,631	.....	72,698	11
210,654	114,509	.....	1,162,504	292,991	.....	12
.....	.....	118,471	669,320	263,351	.....	13
.....	.....	.....	75,000	.....	.....	14
.....	85,525	22,009	921,843	.....	699,147	15
179,564	158,128	46,878	1,134,670	40,815	.....	16
.....	.....	.....	179,564	.....	.....	17
.....	3,088	9,219	28,374	.....	6,549	18
.....	925,807	410,425	7,395,380	5,217,701	.....	20
.....	33,684	.....	1,201,100	.....	315,021	21
.....	2,128	.....	7,116	19,036	.....	22
.....	87,604	5,924	779,128	.....	31,261	23
273,870	1,213,397	590,471	8,081,115	4,682,212	.....	24
.....	18,954	.....	188,377	60,279	.....	25
.....	2,371	.....	16,999	.....	.....	26
.....	10,323	.....	80,115	.....	.....	27
.....	226	18,416	18,643	2,500	.....	28
.....	.....	.....	42,000	.....	.....	29
.....	53,110	.....	228,110	.....	.....	30
.....	933,147	.....	8,207,298	4,431,706	.....	31
1,008,007	763,696	819	4,644,308	1,728,186	.....	32
.....	.....	1,102	1,102	123,898	.....	33
30,099	100,000	.....	372,054	654,209	.....	34
.....	378,449	.....	2,714,253	1,392,428	.....	35
.....	10,065	.....	49,065	.....	36,339	36
.....	54,094	31,996	505,211	36,918	.....	37
.....	249	.....	249	2,635	.....	38
.....	3,014	.....	17,014	.....	8,352	39
.....	1,727	.....	21,642	.....	43,655	40
.....	29,399	.....	317,121	.....	20,520	41
.....	2,170	.....	36,050	.....	52,368	42
.....	2,418	248	23,731	.....	16,681	43
.....	4,317	.....	4,890	59,203	.....	44
2,422,179	928,244	30,569	4,900,758	2,314,407	.....	45
.....	.....	.....	125,000	.....	85,967	46
.....	.....	.....	50,000	.....	33,323	47
.....	.....	.....	10,000	15,649	.....	48
.....	4,941	.....	6,194	12,236	.....	49
.....	33,513	.....	166,393	.....	33,738	50
.....	16,842	251	76,607	90,884	.....	51
35,460	54,064	17,347	438,295	90,229	.....	52
.....	.....	4,008	4,008	35,991	.....	53
.....	136,740	216,509	751,687	731,101	.....	54
600,510	513,179	664,783	4,974,600	3,253,017	.....	55
.....	56,700	.....	356,700	113,546	.....	56
71,228	53,695	.....	614,626	.....	229,396	57
361,926	325,719	984,503	2,739,949	1,763,549	.....	58
.....	.....	1,000	57,000	32,019	.....	59
20,789	32,390	12,451	225,631	.....	26,491	60
100	156,874	.....	935,274	212,588	.....	61
.....	.....	.....	.....	100	.....	62
2,250,716	191,963	9,003	2,451,683	.....	403,957	63

TABLE III.—Income Account—

NAME OF COMPANY.	10	11
	EXPENDITURES	
	DESIG-	
	Interest on funded debt, accrued.	Interest on interest bear- ing current liabilities, accrued, not otherwise provided for.
88 Ohio & Mississippi.....	\$1,063,777	\$2,573
89 Pawnee		
90 Pennsylvania Co. (4).....		
91 Calumet River.....		3,250
92 Pittsburgh, Ft. Wayne & Chicago (O. & F.).....		
92 Pittsburgh, Ft. Wayne & Chicago (F.).....	868,700	
93 South Chicago & Southern (O. & F.).....		
93 South Chicago & Southern (F.).....		6,250
94 Peoria & Pekin Union.....	29,897	
95 Peoria, Decatur & Evansville.....	274,265	21,104
96 Pittsburgh, Cincinnati, Chicago & St. Louis.....	2,368,574	
97 Englewood Connecting (O. & F.).....		
97 Englewood Connecting (F.).....		
98 Quincy, Omaha & Kansas City.....		
99 Rock Island & Peoria.....	42,000	
100 St. Louis, Alton & Springfield.....		17,999
101 St. Louis, Alton & Terre Haute.....	469,000	9,006
102 Belleville & Carondelet.....	29,100	
103 Belleville & Eldorado.....	35,200	
104 Belleville & Southern Illinois.....	81,160	
105 Chicago, St. Louis & Paducah.....	50,000	
106 St. Louis Southern.....	47,300	
107 Carbondale & Shawneetown.....	10,000	
109 St. Louis & Peoria.....	9,100	3,825
110 Terminal Railroad Association of St. Louis.....	292,500	23,587
111 St. Louis Bridge.....	350,000	
112 Terre Haute & Indianapolis.....		
113 St. Louis, Vandalia & Terre Haute.....	314,930	
114 Terre Haute & Peoria.....	90,000	
115 Toledo, Peoria & Western.....	197,400	
116 Toledo, St. Louis & Kansas City.....	523,310	
118 Wabash.....	2,819,075	
121 Wabash, Chester & Western.....	15,000	2,068
Totals	\$51,723,668	\$477,569

(4) Inserted to show relation of subsidiary lines.

Whole Line.—Concluded.

12	13	14	15	16	17	
ASSIGNABLE TO FIXED CHARGES.						
NATION.						
Rents.	Taxes.	Miscellaneous	Total fixed charges, Cols. 10+11+12 +13+14.	Net income, Cols. 9-15.	Net deficit, Cols. 9-15.	
	\$165,490	\$23,669	\$1,255,510		\$70,290	88
	379	153	532		5,430	89
			3,250		3,250	90
\$3,272,851	352,629		3,625,480	\$673,239		91
		22,315	891,015	2,905,480		92
5,674	2,639		8,313			93
			6,250		575	93
7,418	24,182	21,603	83,101	119,599		94
28,500	35,543	8,000	367,413	8,865		95
1,060,477	364,707	148,644	3,942,403	1,039,755		96
138	1,918		2,056			97
				138		97
	5,603	86,403	92,007		13,551	98
	27,154		69,154	291,438		99
	6,400	4,574	28,975	588		100
404,649	43,854	127,224	1,053,795	20,597		101
			29,100	900		102
		19	35,219		16,832	103
		13,215	94,375	123,646		104
			50,000	10,390		105
10,000		224	57,524	18,126		106
			10,000			107
	1,200		14,125		3,144	109
666,900	95,150	31,627	1,109,766	128,384		110
		2,500	352,500	239,400		111
				632,620		112
	55,964	6,906	377,800	207,004		113
	15,070		105,070	317		114
	30,246		233,646	51,735		115
	74,500		597,810		42,994	116
523,850	464,549	46,472	3,853,946	91,475		118
	2,882		19,951	5,004		121
\$14,232,635	\$9,806,384	\$3,846,101	\$80,086,358	\$36,616,701	\$2,276,751	

TABLE III.—Income Account—

NAME OF COMPANY.	18	19	20	21	22	23
	PAYMENTS FROM NET INCOME.					Surplus from operations of year ending June 30, 1892, columns 16-22.
	DIVIDENDS DECLARED.				Total paym'ts from net income including miscellaneous.	
	PREFERRED STOCK.		COMMON STOCK.			
	Amount.	Rate per cent.	Amount.	Rate per cent.		
1 Atchison, Topeka & Santa Fe (1)						
2 Chicago, Santa Fe & California						\$320,430
5 Baltimore & Ohio						
7 Belt Railway of Chicago						119,908
8 Centralia & Chester						
9 Chicago & Alton	\$278,360	8	\$1,129,200	8	\$1,407,560	387,284
10 Joliet & Chicago			105,000	7	105,000	
11 Mississippi River Bridge			21,000	7	35,000	
12 Chicago & Calumet Terminal						
13 Chicago & Eastern Illinois	283,986	6			283,986	9,005
14 Chicago & Western Indiana			225,000	4.50	225,000	38,351
15 Evansville, Terre Haute & Chicago						
16 Chicago & Erie						
17 Chicago & Grand Trunk					40,815	
20 Chicago & Indiana State Line						
21 Chicago & Northwestern	1,563,345	7	2,112,330	6	3,675,735	1,541,966
22 Chicago & Northern Pacific						
23 Chicago & Ohio River						19,036
25 Chicago, Burlington & Northern						
26 Chicago, Burlington & Quincy			3,628,719	4.75	3,628,719	1,053,492
27 Chicago & Iowa						60,279
30 Liverpool Coal			2,500	10	2,500	
34 Chicago, Milwaukee & St. Paul	1,572,613	7			1,572,613	2,859,093
35 Chicago, Rock Island & Pacific			1,384,674	3	1,384,674	343,512
36 Peoria & Bureau Valley			120,000	8	120,000	3,898
37 Chicago, St. Paul & Kansas City						651,209
39 Cleve'd, Cincinnati, Chicago & St. L.	500,000	5	840,000	3	1,340,000	52,428
40 Kankakee & Seneca						
41 Peoria & Eastern						36,918
42 DePue, Ladd & Eastern						2,635
43 East St. Louis & Carondelet						
44 East St. Louis Connecting						
45 Elgin, Joliet & Eastern						
46 Fulton County Narrow Gauge						
48 Grand Tower & Cape Girardeau						
49 Grand Tower & Carbondale						59,203
50 Illinois Central			2,250,000	5	2,250,000	64,407
52 Chicago, Havana & Western						
58 Rantoul						
59 South Chicago						15,649
61 Indiana & Illinois Southern						12,236
62 Indianapolis, Decatur & Western						
63 Indiana, Illinois & Iowa					30,095	60,789
64 Iowa Central	55,364	1			55,364	34,865
72 St. Louis & Chicago						35,991
73 Lake Erie & Western	532,800	4.50			532,800	198,301
74 Lake Shore & Michigan Southern			3,215,322	6.50	3,215,322	37,694
75 Louisville & Nashville						113,546
77 Louisville, Evansville & St. L., Con.						
78 Michigan Central	1,030,601	5.50			1,501,386	262,162
79 Joliet & Northern Indiana			24,000	8	24,000	8,019
80 Mobile & Ohio						
83 New York, Chicago & St. Louis	150,000	3			249,940	
84 Chicago & State Line						100
85 Northern Pacific (1)						
86 Wisconsin Central Lines						
88 Ohio & Mississippi						
89 Pawnee						
90 Pennsylvania Co. (1)						
91 Calumet River						
92 Pitts., Ft. Wayne & Chi. (O. & F.)						673,239
92 Pitts., Ft. Wayne & Chi. (F.)	1,005,151	7	1,380,000	7	2,385,151	520,329
93 South Chicago & Southern (O. & F.)						
93 South Chicago & Southern (F.)						

(1) Inserted to show relation of subsidiary lines.

Whole Line—Continued.

24	25	26	27	28	29	30	
Deficit from operations of year ending June 30, 1892, Cols. 16-22.	Surplus on June 30, 1891.	Deficit on June 30, 1891.	Additions for year.	Deductions for year.	Surplus on June 30, 1892.	Deficit on June 30, 1892.	
.....	.....	.....	.....	.....	.....	.....	1
.....	.....	\$2,415,003	.....	.....	.....	\$2,094,572	2
\$22,985	.....	4,551,878	.....	.....	.....	4,574,863	3
.....	.....	664,353	\$707,335	.....	\$162,891	.....	5
2,315	.....	1,596	.....	.....	.....	3,911	7
.....	\$2,203,141	.....	.....	\$574,043	2,016,382	.....	8
.....	.....	.....	.....	.....	.....	.....	9
72,698	.....	82,204	.....	.....	.....	154,902	10
.....	1,339,623	.....	.....	29,870	1,318,759	.....	11
.....	639,503	.....	.....	.....	677,855	.....	12
.....	70,441	.....	.....	.....	70,441	.....	13
699,147	.....	181,052	.....	.....	.....	880,200	14
.....	.....	.....	.....	.....	.....	.....	15
6,549	.....	53,823	.....	.....	.....	60,372	16
.....	5,621,596	.....	.....	.....	7,163,563	.....	17
315,021	592,203	.....	.....	286,216	.....	9,064	18
.....	.....	24,907	.....	.....	.....	5,870	19
31,261	.....	619,052	162	.....	.....	650,150	20
.....	9,396,243	.....	.....	.....	10,449,736	.....	21
.....	355,617	.....	.....	.....	415,897	.....	22
.....	.....	.....	.....	.....	.....	.....	23
.....	3,094,852	.....	.....	84,737	5,869,208	.....	24
.....	.....	426,561	.....	.....	.....	83,049	25
.....	72,152	.....	.....	.....	76,050	.....	26
.....	1,143,898	.....	.....	.....	1,798,108	.....	27
.....	735,278	.....	28,313	.....	816,020	.....	28
36,339	.....	321,350	.....	.....	.....	357,689	29
.....	.....	235,981	.....	.....	.....	199,062	30
.....	1,371	.....	.....	.....	4,006	.....	31
8,352	28,774	.....	11,208	.....	31,630	.....	32
43,655	.....	1,675	.....	.....	.....	45,331	33
20,520	12,145	.....	.....	.....	.....	8,375	34
32,368	.....	306,115	.....	.....	.....	338,483	35
16,681	.....	45,535	.....	.....	.....	62,216	36
.....	60,960	.....	.....	.....	120,163	.....	37
.....	4,751,892	.....	.....	434,006	4,385,293	.....	38
85,967	.....	371,352	.....	.....	.....	457,319	39
33,323	.....	159,574	.....	.....	.....	192,897	40
.....	24,534	.....	.....	.....	40,184	.....	41
.....	42,459	.....	.....	.....	54,695	.....	42
33,738	.....	149,627	.....	.....	.....	183,365	43
.....	127,929	.....	10,314	.....	199,062	.....	44
.....	25,519	.....	.....	.....	60,384	.....	45
.....	43,221	.....	.....	.....	79,213	.....	46
.....	412,585	.....	.....	.....	610,885	.....	47
.....	11,749,682	.....	.....	78,096	11,709,281	.....	48
.....	29,298	.....	.....	.....	142,844	.....	49
229,306	847,342	.....	50,000	.....	640,531	.....	50
.....	6,814,734	.....	.....	27,504	7,076,896	.....	51
.....	16,157	.....	.....	.....	24,176	.....	52
26,491	.....	148,053	.....	.....	.....	174,550	53
57,351	196,774	.....	6,347	.....	165,769	.....	54
.....	300	.....	.....	.....	400	.....	55
.....	.....	526,308	.....	.....	.....	930,265	56
403,957	.....	.....	.....	.....	.....	.....	57
79,290	496,354	.....	.....	4,268	421,794	.....	58
5,430	564	.....	56,400	54,630	.....	3,097	59
.....	.....	.....	.....	.....	.....	.....	60
3,250	.....	8,125	.....	.....	.....	11,375	61
.....	1,524,668	.....	.....	.....	2,197,907	.....	62
.....	7,018,600	.....	.....	.....	7,538,930	.....	63
.....	.....	5,985	.....	.....	.....	5,985	64
575	.....	18,823	.....	.....	.....	19,399	65

TABLE III.—*Income Account—*

NAME OF COMPANY.	18	19	20	21	22	23
	PAYMENTS FROM NET INCOME.					Surplus from operations of year ending June 30, 1892, columns 16-22.
	DIVIDENDS DECLARED.				Total paym'ts from net income including miscellaneous.	
	PREFERRED STOCK.		COMMON STOCK.			
	Amount.	Rate per cent.	Amount.	Rate per cent.		
94 Peoria & Pekin Union.....	.....	.....	.....	.....	.....	\$119,599
95 Peoria Decatur & Evansville.....	.....	.....	.....	.....	.....	8,865
96 Pittsburg, Cincinnati, Chi. & St. L...	\$895,573	4	.....	.....	\$895,573	144,182
97 Englewood Connecting (F) .....	.....	.....	.....	.....	.....	138
98 Quincy, Omaha & Kansas City .....	.....	.....	.....	.....	.....	.....
99 Rock Island & Peoria.....	.....	.....	\$225,000	15	225,000	66,438
100 St. Louis Alton & Springfield .....	.....	.....	.....	.....	.....	588
101 St. Louis, Alton & Terre Haute.....	.....	.....	.....	.....	.....	20,597
102 Belleville & Carondelet .....	.....	.....	.....	.....	.....	900
103 Belleville & Eldorado.....	.....	.....	.....	.....	.....	.....
104 Belleville & Southern Illinois.....	102,000	8	.....	.....	102,000	21,646
105 Chicago, St. Louis & Paducah.....	.....	.....	.....	.....	.....	10,390
106 St. Louis Southern.....	.....	.....	23,000	5	23,000	.....
109 St. Louis & Peoria .....	.....	.....	.....	.....	.....	.....
110 Terminal Railroad Asso. of St. Louis	.....	.....	.....	.....	.....	128,384
111 St. Louis Bridge.....	239,400	{ 6-1st 3-2d	.....	.....	239,400	.....
112 Terre Haute & Indianapolis.....	.....	.....	.....	.....	632,620	.....
113 St. Louis, Vandalia & Terre Haute.	432,516	7	.....	.....	432,516	.....
114 Terre Haute & Peoria .....	.....	.....	.....	.....	.....	317
115 Toledo, Peoria & Western.....	.....	.....	.....	.....	.....	51,735
116 Toledo, St. Louis & Kansas City.....	.....	.....	.....	.....	.....	.....
118 Wabash .....	.....	.....	.....	.....	.....	91,475
121 Wabash, Chester & Western.....	.....	.....	.....	.....	.....	5,004
Totals	\$8,641,709	.....	\$16,685,806	.....	\$26,615,772	\$10,268,665

Whole Line—Continued.

24	25	26	27	28	29	30	
Deficit from operations of year ending June 30, 1892. Cols. 16-22.	Surplus on June 30, 1891.	Deficit on June 30, 1891.	Additions for year.	Deductions for year.	Surplus on June 30, 1892.	Deficit on June 30, 1892.	
.....	\$143,096	.....	.....	.....	\$151,961	.....	94
.....	174,154	.....	.....	\$27,796	290,600	.....	95
.....	.....	\$3,733	.....	.....	.....	\$3,595	96
\$13,551	.....	.....	.....	.....	.....	13,551	97
.....	869,653	.....	.....	.....	936,091	.....	98
.....	.....	2,532	.....	.....	.....	1,943	99
.....	190,070	.....	\$1,276,792	.....	1,487,460	.....	100
.....	3,886	.....	.....	.....	4,786	.....	101
16 832	.....	205,168	.....	.....	.....	222,001	102
.....	14,449	.....	.....	.....	36,096	.....	103
.....	.....	.....	.....	.....	10,390	.....	104
4,873	5,866	.....	.....	.....	993	.....	105
3,144	.....	10,453	.....	.....	.....	13,598	106
.....	195,174	.....	.....	.....	323,558	.....	107
.....	.....	.....	.....	.....	.....	.....	108
.....	.....	.....	.....	.....	.....	.....	109
.....	.....	.....	.....	.....	.....	.....	110
.....	.....	.....	.....	.....	.....	.....	111
.....	.....	.....	.....	.....	.....	.....	112
225,511	644,021	.....	.....	.....	418,509	.....	113
.....	4,716	.....	.....	.....	5,034	.....	114
.....	.....	189,436	.....	.....	.....	137,701	115
42,994	.....	47,933	39,694	.....	.....	51,233	116
.....	274,082	.....	.....	218,857	146,700	.....	117
.....	.....	22,582	.....	.....	.....	17,578	118
.....	.....	.....	.....	.....	.....	.....	119
\$2,544,487	\$62,012,596	\$11,798,253	\$2,186,598	\$1,819,996	\$70,151,153	\$11,965,631	121

TABLE IV.—*Earnings and Income in*A.—*Earnings from Operation.*

1	2	3	4	5	6	7	8
EARNINGS ARISING FROM PASSENGER SERVICE.							
NAME OF COMPANY.	Passenger revenue.	Revenue per passenger per mile, Cents.	Mail.	Express	Total passenger earnings, including miscellaneous.	Passenger earnings per train mile, Dollars and Cents.	Proportion to total earnings, 100x Col. 6÷Col. 16
1 Atchison, Topeka & Santa Fe ⁽¹⁾	2,168	2.168	\$33,958	\$79,304	\$641,290	.67732	18.10
2 Chicago, Santa Fe & California	46,841	1.937	4,201	5,528	57,745	.71526	29.48
5 Baltimore & Ohio	3,547	2.34	942	324	4,815		42.26
7 Belt Railway of Chicago	1,817,573	2.042	144,735	144,327	2,106,636	1.40766	53.30
8 Centralia & Chester							
9 Chicago & Alton							
12 Chicago & Calumet Terminal	530,035	1.547	28,457	31,469	606,764	1.03387	25.58
13 Chicago & Eastern Illinois	185,043	1.348	4,097	3,607	208,707	.95088	42.89
17 Chicago & Grand Trunk	1,029,657	2.165	91,795	58,311	1,198,136	1.07396	26.88
21 Chicago & Northwestern	134,122				134,957		14.04
22 Chicago & Northern Pacific	14,240	2.975	3,960	615	18,816	1.0185	23.02
23 Chicago & Ohio River	104,926	2.01	12,784	6,701	125,446	.71295	20.39
25 Chicago, Burlington & North'n	1,695,679		325,150	172,831	2,226,093		28.51
26 Chicago, Burlington & Quincy	74,913	2.311	6,616	12,499	94,030	.87321	31.45
27 Chicago & Iowa	400,479	2.464	60,696	36,454	526,828	1.15141	27.08
34 Chicago, Milwaukee & St. Paul	1,333,458	1.898	74,598	97,446	1,574,045	1.26534	27.10
35 Chicago, Rock Island & Pacific	230,197	2.077	20,378	17,953	332,211	1.03505	20.53
37 Chicago, St. Paul & Kansas C.	1,147,260	2.219	102,801	86,728	1,336,739	1.06176	32.24
39 Cleveland, Cin., Chi. & St. L.	12,011	2.661	1,859	2,400	16,270	1.0-816	20.45
40 Kankakee & Seneca	207,376	2.481	19,635	18,578	245,589	.94212	35.54
41 Peoria & Eastern							
43 East St. Louis & Carondelet							
44 East St. Louis Connecting	16,645	2.443	1,017	6,000	23,662	1.24869	3.06
45 Elgin, Joliet & Eastern	14,183	2.921	3,144	2,399	20,639	.541	36.49
46 Fulton County Narrow Gauge	6,289	2.578	1,890	232	8,411	.31527	17.43
48 Grand Tower & Cape Girardeau	13,761	2.682	1,612	198	15,571	.60307	11.43
49 Grand Tower & Carbondale	2,618,591	1.958	241,097	204,985	3,159,550	.89266	29.46
50 Illinois Central	12,271	2.692	3,291	224	15,786	.46548	28.84
61 Indiana & Illinois Southern	74,934	2.353	8,283	9,459	94,456	.65470	36.89
62 Indianapolis, Decatur & West'n	10,012	2.534	4,111	677	14,800	1.27232	4.52
63 Indiana, Illinois & Iowa	53,873	2.455	7,019	2,988	64,591	.54419	15.33
64 Iowa Central	148,058	2.419	9,356	11,609	171,415	.82414	31.34
73 Lake Erie & Western	207,940	1.990	54,999	13,865	280,269	1.44645	49.05
74 Lake Shore & Michigan S'th'n	295,019	2.506	36,470	22,028	362,324	1.32896	32.51
75 Louisville & Nashville	140,949	2.431	10,942	9,840	161,733	.75683	34.42
77 Louisville, Evansv. & St. L., Con.	178,150	2.237	3,845	6,189	188,185	1.04544	33.06
78 Michigan Central	126,242	2.261	23,719	20,771	174,717	.63422	21.65
80 Mobile & Ohio	15,333	2.910	925	413	16,751	1.26749	7.39
83 New York, Chicago & St. Louis							
85 Northern Pacific ⁽¹⁾	211,250	2.355	8,227	8,610	270,205	1.30552	28.64
86 Wisconsin Central Lines	619,797	2.149	72,726	54,049	761,393	1.14497	39.74
88 Ohio & Mississippi	1,414	2.513	240	135	1,821	.41795	26.50
89 Pawnee							
90 Pennsylvania Co. (1)	96,945	2.116	7,771	7,655	114,953	1.15028	24.54
92 Pittsburgh, Ft. Wayne & Chi.	16,134	1.608			16,135	.60077	51.34
93 South Chicago & Southern	19,189				19,945		3.33
94 Peoria & Pekin Union	136,677	2.732	14,206	11,429	163,312	.82541	28.13
95 Peoria, Decatur & Evansville	81,181	2.283	15,357	8,187	110,389	1.0737	21.07
96 Pittsburgh, Cin., Chi. & St. L.							
97 Englewood Connecting	125,572	2.757	10,000	6,000	143,396	1.14581	18.84
99 Rock Island & Peoria	31,926		6,568	3,600	45,094		33.28
100 St. Louis, Alton & Springfield	274,412	2.343	27,157	25,000	327,789	1.02942	22.13
101 St. Louis, Alton & Terre Haute							
109 St. Louis & Peoria							
110 Terminal Railroad Ass. of St. L.	155,403	7.191	10,750	23,229	189,382		27.86

⁽¹⁾ Inserted to show relation of subsidiary lines.

Illinois for year ending June 30, 1892.

A.—Earnings from Operation.

9	10	11	12	13	14	15	16	17	18	
EARNINGS ARISING FROM FREIGHT SERVICE.					OTHER EARNINGS.		SUMMARY OF EARNINGS.			
Freight revenue.	Revenue per ton per mile. Cents.....	Total freight earnings, including stock yards, elevators and miscellaneous.	Freight earnings per train mile. Dollars and Cents.....	Proportion to total earnings, 100XCol. 11÷Col. 16	Balance of car mileage and switching charges.....	Telegraph, rentals, and other sources.	Total earnings from operation. Cols. 6+11+14+15.	Total earnings per train mile.	Proportion to total income, 100XCol.16÷Col. 24.	
\$2,838,841	.939	\$2,841,665	1.71959	80.24	.....	\$58,267	\$3,541,224	\$1.36236	100.00	1
137,697	.519	138,191	2.06251	70.52	.....	.....	195,836	1.32603	100.00	2
779,787	.....	790,290	.64759	100.00	.....	.....	790,290	.64759	100.00	7
6,576	3.90	6,576	.31000	57.74	.....	.....	11,391	.32097	100.00	8
4,167,731	.966	4,167,731	1.57657	65.89	.....	.....	6,324,920	1.52772	95.87	9
.....	.....	.....	.....	.....	\$122,059	.....	12,777	134,837	99.78	12
1,707,314	.613	1,753,333	1.92995	73.51	638	10,514	2,371,251	1.58572	97.61	13
274,929	.685	274,929	1.33784	56.48	2,547	332	486,517	1.07924	98.03	17
3,241,679	1.013	3,246,047	1.45341	72.82	.....	.....	4,457,100	1.33086	99.02	21
.....	.....	.....	.....	.....	71,712	754,297	960,967	91.72	22	
62,808	3.084	62,808	1.25912	76.86	.....	86	81,712	1.19535	100.00	23
483,857	.762	483,857	1.57748	78.68	.....	5,651	614,955	1.27403	100.00	25
5,361,061	.....	5,363,458	.....	68.70	98,631	117,867	7,805,959	.....	95.71	26
193,233	.770	193,233	1.43381	64.63	2,897	8,777	298,938	1.23297	75.07	27
1,394,485	1.026	1,405,073	1.57882	72.23	.....	13,256	1,945,158	1.44353	99.26	34
4,054,047	1.029	4,054,047	1.77011	69.81	67,890	110,988	5,806,970	1.64305	99.45	35
1,282,045	.864	1,282,045	1.62352	79.23	.....	3,930	1,618,187	1.45699	99.93	37
2,738,825	.710	2,738,825	1.5008	66.06	.....	69,819	4,145,434	1.34418	99.81	39
63,162	.831	63,162	1.38259	79.41	.....	98	79,530	1.30566	100.00	40
441,300	.633	441,300	1.31918	63.86	3,559	538	690,988	1.16092	100.00	41
64,878	.....	64,878	.....	82.94	.....	13,336	78,215	.....	100.00	43
150,293	.....	150,293	.....	100.00	.....	.....	150,293	.....	100.00	44
727,573	.743	727,573	1.46058	94.18	.....	21,292	772,528	1.49399	100.00	45
35,908	1.057	35,908	.94035	63.51	.....	.....	56,547	.68649	100.00	46
39,833	.922	39,833	.96712	82.57	.....	.....	48,245	.71086	97.98	48
117,143	1.686	117,143	1.97314	86.03	.....	3,446	136,161	1.59832	100.00	49
6,889,190	.796	6,902,713	1.28195	64.34	.....	661,003	10,723,267	1.20162	99.15	50
36,360	1.705	36,360	1.62707	66.44	.....	2,573	54,721	.76058	100.00	61
160,865	1.329	161,537	1.64790	63.11	.....	.....	255,993	1.05651	99.58	62
310,945	.881	311,989	1.55986	95.32	495	.....	327,286	1.54593	100.00	63
355,687	1.105	356,366	1.42944	84.61	.....	225	421,184	1.14452	99.92	64
358,881	.727	358,881	1.39318	65.62	4,607	11,965	546,870	1.17457	100.00	73
261,406	.767	286,907	3.71391	50.21	.....	4,130	571,306	2.10802	98.99	74
745,250	.826	745,250	1.49535	66.87	.....	6,694	1,114,269	1.44519	100.00	75
301,471	1.015	301,471	1.59344	64.17	900	5,674	469,779	1.15998	97.79	77
380,994	.811	380,994	1.33981	66.94	.....	.....	569,179	1.26863	97.95	78
629,202	.792	629,202	1.1166	77.98	2,857	3	806,781	.96161	100.00	80
209,659	1.569	209,659	3.25079	92.48	.....	294	226,705	2.91728	99.80	83
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
662,280	1.108	662,280	2.3426	70.20	7,877	2,953	943,316	1.92619	100.00	86
1,154,180	.907	1,154,180	1.36675	60.26	.....	.....	1,915,573	1.26866	100.00	88
5,050	6.029	5,050	.49732	73.50	.....	.....	6,871	.50749	100.00	89
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
269,177	.679	269,177	1.75968	57.46	.....	84,275	468,406	1.85210	100.00	92
14,861	1.995	14,861	1.63495	47.28	403	27	31,427	.87425	100.00	93
59,045	.....	59,045	.....	9.87	284,568	234,526	598,086	.....	100.00	94
377,228	.942	377,228	1.48086	64.98	32,676	7,236	580,454	1.28251	99.09	95
268,186	.682	268,186	1.45846	10.76	141,016	4,776	524,370	1.82896	99.94	96
.....	.....	.....	.....	.....	.....	4,045	4,045	.....	100.00	97
615,810	1.429	615,810	2.0427	80.93	.....	1,628	760,836	1.78341	97.88	99
90,372	.....	90,372	.....	66.72	.....	.....	135,467	.....	100.00	100
1,100,331	.991	1,100,331	1.50874	74.30	6,101	46,706	1,480,929	1.97017	77.50	101
29,584	1.854	29,584	3.380	99.03	289	.....	29,873	3.46869	100.00	109
444,542	8.191	444,542	.....	65.40	39,446	6,265	679,637	.....	85.66	110

TABLE IV.—*Earnings and Income in*A.—*Earnings from Operation.*

1	2	3	4	5	6	7	8
NAME OF COMPANY.	EARNINGS ARISING FROM PASSENGER SERVICE.						
	Passen- ger revenue.	Revenue per pas- senger per mille, <i>Cents</i>	Mail.	Express	Total pas- senger earnings, including miscel- laneous.	Passenger earnings per train mille, <i>Dollars and Cents</i> .	Proportion to total earnings, 100X Col. 6÷Col. 16.
112 Terre Haute & Indianapolis ..	\$450,135	2.389	\$217,792	\$47,512	\$716,237	.98557	38.30
114 Terre Haute & Peoria	103,689	.....	13,156	7,850	124,696	.....	32.88
115 Toledo, Peoria & Western.....	274,710	2.435	27,956	30,000	336,782	1.07163	33.18
116 Toledo, St. Louis & Kansas C.	81,650	1.880	6,936	14,999	107,636	.54115	17.16
118 Wabash.....	1,167,012	2.057	128,739	118,296	1,434,849	.9131	29.91
121 Wabash, Chester & Western..	20,290	2.791	3,795	1,172	25,550	.52579	34.10
Totals.....	\$17,228,466	2.0935	\$1,913,214	\$1,451,095	\$21,091,833	1.01632	27.58

Illinois for year ending June 30, 1892—Continued.

A.—Earnings from Operation.

9	10	11	12	13	14	15	16	17	18	
EARNINGS ARISING FROM FREIGHT SERVICE.					OTHER EARNINGS.		SUMMARY OF EARNINGS.			
Freight revenue.	Revenue per ton per mile. Cents.....	Total freight earnings, including stock yards, elevators and miscellaneous.	Freight earnings per train mile. Dollars and Cents	Proportion to total earnings, 100×Col. 11÷Col. 16.	Balance of car mileage and switching charges.....	Telegraph, rentals, and other sources.	Total earnings from operation. Cols. 6+11+14+15.	Total earnings per train mile.	Proportion to total income, 100×Col. 16÷Col. 24.	
\$1,147,281	.839	\$1,147,281	1.37772	61.35	.....	\$5,672	\$1,869,191	\$1.19861	100.00	112
254,534	.....	254,534	.....	67.12	.....	.....	379,230	.....	100.00	114
628,031	1.482	629,536	1.33875	61.85	.....	51,472	1,017,791	1.29735	99.72	115
516,488	.487	516,488	1.21511	82.84	.....	.....	623,525	1.00108	100.00	116
3,266,989	.705	3,361,594	1.365	70.09	.....	.....	4,796,443	1.1779	97.37	118
49,309	2.324	49,309	1.9642	65.82	.....	55	74,914	1.01650	100.00	121
\$51,867,845	.8618	\$52,082,468	1.53931	68.12	\$801,177	\$2,410,958	\$76,476,438	\$1.35393	93.49	

TABLE IV.—*Earnings and Income in Illinois for year ending June 30, 1892—Continued.*

B.—Income from Property Owned but not Operated.

		19	20	21	22	23	24
		INCOME FROM PROPERTY OWNED.					Total earnings and income, Cols. 16+22
NAME OF COMPANY.	SOURCE OF INCOME.			Total income from property described, Cols. 19+20+21.	Proportion to total income, 100 X Col. 22÷Col. 24.		
	Stocks	Bonds.	Miscellaneous, including rents.				
1 Atchison, Topeka & Santa Fe (1).....							1
2 Chicago, Santa Fe & California.....						\$3,541,224	2
5 Baltimore & Ohio.....						195,836	5
7 Belt Railway of Chicago.....						790,290	7
8 Centralia & Chester.....						11,391	8
9 Chicago & Alton.....	\$32,032	\$332,810	\$7,226	\$272,068	4.13	6,596,989	9
10 Joliet & Chicago.....			105,750	105,750	100.00	105,750	10
11 Mississippi River Bridge.....			34,699	34,699	100.00	34,699	11
12 Chicago & Calumet Terminal.....			288	288	.22	135,125	12
13 Chicago & Eastern Illinois.....	45,000	572	12,480	58,053	2.39	2,429,305	13
14 Chicago & Western Indiana.....			932,672	932,672	100.00	932,672	14
15 Evansville, Terre Haute & Chi.....			8,475	8,475	100.00	8,475	15
17 Chicago & Grand Trunk.....			9,738	9,738	1.97	496,255	17
18 Grand Trunk Junction.....			179,564	179,564	100.00	179,564	18
20 Chicago & Indiana State Line.....			21,825	21,825	100.00	21,825	20
21 Chicago & Northwestern.....	37,543	72	6,430	44,046	98	4,501,147	21
22 Chicago & Northern Pacific.....			86,650	86,650	8.28	1,047,618	22
23 Chicago & Ohio River.....						81,712	23
25 Chicago, Burlington & Northern.....						614,955	25
26 Chicago, Burlington & Quincy.....	237,364	72,725	39,211	349,301	4.29	8,155,261	26
27 Chicago & Iowa.....			99,243	99,243	24.93	398,181	27
28 Galesburg & Rio.....			16,999	16,999	100.00	16,999	28
29 Illinois Valley & Northern.....			80,115	80,115	100.00	80,115	29
30 Liverpool Coal.....			21,143	21,143	100.00	21,143	30
31 Quincy, Alton & St. Louis.....			42,000	42,000	100.00	42,000	31
32 St. Louis, Rock Island & Chi.....			228,110	228,110	100.00	228,110	32
34 Chicago, Milwaukee & St. Paul.....	4,087	799	9,353	14,241	.74	1,959,399	34
35 Chicago, Rock Island & Pacific.....	31,598			31,598	.55	5,838,569	35
36 Peoria & Bureau Valley.....			125,000	125,000	100.00	125,000	36
37 Chicago, St. Paul & Kansas City.....	1,083			1,083	.07	1,619,271	37
39 Cleveland, Cin., Chi. & St. Louis.....	5,866		1,690	7,557	.19	4,152,992	39
40 Kankakee & Seneca.....						79,530	40
41 Peoria & Eastern.....						690,988	41
42 De Pue, Ladd & Eastern.....			2,884	2,884	100.00	2,884	42
43 East St. Louis & Carondelet.....						78,215	43
44 East St. Louis Connecting.....						150,293	44
45 Elgin, Joliet & Eastern.....						772,528	45
46 Fulton County Narrow Gauge.....						56,547	46
47 Grand Tower & Cape Girardeau.....			992	992	2.02	49,238	47
49 Grand Tower & Carbondale.....						136,161	49
50 Illinois Central.....		30,360	61,037	91,398	.85	10,814,665	50
52 Chicago, Havana & Western.....		4,075	34,957	39,032	100.00	39,032	52
58 Rantoul.....		5,900	10,776	16,676	100.00	16,676	58
59 South Chicago.....			25,649	25,649	100.00	25,649	59
61 Indiana & Illinois Southern.....						54,721	61
62 Indianapolis, Decatur & Western.....			1,054	1,054	.42	257,047	62
63 Indiana, Illinois & Iowa.....						327,286	63
64 Iowa Central.....			3	3	.08	421,187	64
72 St. Louis & Chicago.....			39,999	39,999	100.00	39,999	72
73 Lake Erie & Western.....						516,870	73
74 Lake Shore & Michigan Southern.....	3,105	406	2,269	5,781	1.01	577,087	74
75 Louisville & Nashville.....						1,114,269	75
77 Louisv., E. ansy. & St. Louis Con.....		2,650	7,937	10,587	2.21	480,367	77
78 Michigan Central.....	11,770	90		11,860	2.05	581,040	78
79 Joliet & Northern Indiana.....			57,367	57,367	100.00	57,367	79
80 Mobile & Ohio.....						806,781	80
83 New York, Chicago & St. Louis.....		48	392	441	.20	227,146	83
84 Chicago & State Line.....			100	100	100.00	100	84

(1) Inserted to show relation of following subsidiary lines.

TABLE IV.—*Earnings and Income in Illinois for year ending June 30, 1892—Concluded.*B.—*Income from Property Owned but not Operated.*

		19	20	21	22	23	24
		INCOME FROM PROPERTY OWNED.					
NAME OF COMPANY.	SOURCE OF INCOME.			Total income from property described. Cols. 19+20+21.	Proportion to total income, 100 × Col. 24 ÷ Col. 23	Total earnings and income. Cols. 16+22	
	Stocks	Bonds.	Miscellaneous, including rents.				
85 Northern Pacific (F).....							85
86 Wisconsin Central Lines.....						\$943,316	86
88 Ohio & Mississippi.....						1,915,573	88
89 Pawnee.....						6,871	89
90 Pennsylvania Co. (F).....							90
92 Pittsburgh, Ft. W. & Chi. (O & F)						468,406	92
92 Pittsburgh, Ft. W. & Chi. (F).....				\$129,242	\$129,242	100.00	92
93 South Chi. & Southern (O & F).....						31,427	93
93 South Chicago & Southern (F).....				5,674	5,674	100.00	93
94 Peoria & Pekin Union.....						598,086	94
95 Peoria, Decatur & Evansville.....	\$3,500		1,816	5,316	.91	585,771	95
96 Pittsburgh, Cin., Chi. & St. Louis.	77		220	298	.06	524,668	96
97 Englewood Connecting (O & F).....						4,045	97
97 Englewood Connecting (F).....			138	138	100.00	138	97
99 Rock Island & Peoria.....	600		13,826	14,426	2.12	775,263	99
100 St. Louis, Alton & Springfield.....						135,467	100
101 St. Louis, Alton & Terre Haute.....		340,520	89,276	429,796	22.50	1,910,725	101
102 Belleville & Carondelet.....			30,000	30,000	100.00	30,000	102
103 Belleville & Eldorado.....			18,386	18,386	100.00	18,386	103
104 Belleville & Southern Illinois.....			218,022	218,022	100.00	218,022	104
105 Chicago, St. Louis & Paducah.....			60,390	60,390	100.00	60,390	105
106 St. Louis Southern.....			75,650	75,650	100.00	75,650	106
107 Carbondale & Shawneetown.....			10,000	10,000	100.00	10,000	107
109 St. Louis & Peoria.....						29,873	109
110 Terminal Railroad Ass. of St. L ..			113,724	113,724	14.34	793,361	110
111 St. Louis Bridge.....			414,330	414,330	100.00	414,330	111
112 Terre Haute & Indianapolis.....						1,869,191	112
113 St. L., Vandalia & Terre Haute.....			584,805	584,805	100.00	584,805	113
114 Terre Haute & Peoria.....						379,220	114
115 Toledo, Peoria & Western.....			2,776	2,776	.28	1,020,567	115
116 Toledo, St. Louis & Kansas City.....						623,525	116
118 Wabash.....	42,533	900	86,106	129,539	2.63	4,925,983	118
121 Wabash, Chester & Western.....						74,914	121
Total	\$456,163	\$691,930	\$4,168,480	\$5,316,574	6.51	\$81, 93,012	

(F) Inserted to show relation of following subsidiary lines.

TABLE V—*Expend-*A.—*Operating Expenses.*

	1	2	3	4	5	6	7	8	9
	EXPENDITURE ASSIGNABLE TO OPERATION.								
	MAINTENANCE OF WAY AND STRUCTURES.					MAINTENANCE OF EQUIPMENT.			
NAME OF COMPANY.	Amount.	Proportion to total operating expenses, 100% Col. 18.	Proportion assigned to		Amount.	Proportion to total operating expenses, 100% Col. 18.	Proportion assigned to		
			Passenger service,.....	Freight service,.....			Passenger service,.....	Freight service,.....	
1 Atchison, Topeka & Santa Fe (1)									
2 Chi., Santa Fe & California..	\$253,474	8.74	35.99	64.01	\$467,356	16.12	25.92	74.08	
5 Baltimore & Ohio	19,435	11.96			39,084	18.51			52.61
7 Belt Railway of Chicago	82,372	15.82		100.00	89,542	17.20			100.00
8 Centralia & Chester	5,171	39.92	50.00	50.00	190	1.47	47.36		52.61
9 Chicago & Alton	650,537	18.13	36.12	63.88	586,807	16.35	35.63		61.37
12 Chicago & Calumet Terminal..	10,929	9.14		100.00	15,989	13.37			100.00
13 Chicago & Eastern Illinois....	260,983	17.38	39.14	60.86	289,139	19.26	17.84		82.16
17 Chicago & Grand Trunk	34,523	11.75	39.98	60.02	47,567	16.22	39.90		60.10
21 Chicago & Northwestern	574,989	20.92	32.92	67.08	435,084	15.83	19.76		80.24
22 Chicago & Northern Pacific....	13,698	8.47	83.86	16.14	17,789	11.01	90.24		9.76
23 Chicago & Ohio River	24,479	44.06	26.99	73.01	3,389	6.10	29.01		70.99
25 Chi., Burlington & Northern...	80,632	18.56	37.02	62.98	37,871	8.72	26.24		73.76
26 Chicago, Burlington & Quincy	1,131,229	22.78	35.35	64.65	875,776	17.64	22.62		77.38
27 Chicago & Iowa	22,556	15.08	44.41	55.59	20,506	13.71	35.31		64.69
31 Chicago, Milwaukee & St. Paul	254,130	21.15	34.21	65.79	231,694	19.54	28.38		71.62
35 Chicago, Rock Island & Pacific	501,657	14.81	35.20	64.80	510,033	15.06	31.13		68.87
37 Chi., St. Paul & Kansas City...	134,266	16.85	27.31	72.69	117,766	9.51	21.64		78.36
39 Cleveland, Cin., Chi. & St. Louis	541,650	18.54	40.82	59.18	499,237	17.08	36.37		63.63
40 Kankakee & Seneca	32,712	48.96	25.00	75.00	5,391	8.07	35.36		64.64
41 Peoria & Eastern	143,121	29.34	43.79	56.21	75,559	15.49	34.66		65.31
43 East St. Louis & Carondelet..	21,588	35.35		100.00	9,136	13.10			100.00
44 East St. Louis Connecting	28,989	16.82		100.00	18,100	10.50			100.00
45 Elgin, Joliet & Eastern	89,754	16.51	3.66	96.34	75,589	15.45	3.66		96.34
46 Fulton County Narrow Gauge.	21,394	45.97	33.33	66.67	6,969	13.18	36.66		63.34
48 Grand Tower & Cape Girardeau	13,901	32.95	25.69	74.31	5,422	12.85	32.97		67.03
49 Grand Tower & Carbondale....	15,207	21.10	30.00	70.00	14,712	20.41	13.77		86.23
50 Illinois Central	1,335,993	19.29	40.00	60.00	1,134,353	16.63	26.63		73.37
61 Indiana & Illinois Southern	11,679	33.61	30.00	70.00	4,290	9.83	21.46		75.54
62 Indianapolis, Decatur & Wn....	51,230	26.86	59.54	40.46	26,594	13.91	30.68		69.32
63 Indiana, Illinois & Iowa	43,867	21.11	5.50	94.50	21,409	10.45	4.16		95.84
64 Iowa Central	76,940	25.10	32.36	67.64	33,617	10.96	23.02		76.98
73 Lake Erie & Western	54,726	18.41	44.67	55.33	49,239	16.56	32.69		67.31
74 Lake Shore & Michigan S'n....	72,350	24.23	35.95	64.05	47,451	15.89	26.23		73.77
75 Louisville & Nashville	156,510	22.15	36.39	63.61	135,674	19.20	19.68		80.32
77 Louisville, Evansv. & St. L. Con.	86,665	21.62	52.77	47.23	49,338	14.01	35.68		64.42
78 Michigan Central	85,564	19.44	36.62	63.38	86,230	19.59	56.52		43.48
80 Mobile & Ohio	154,360	25.40	32.83	67.17	68,245	11.23	19.31		80.69
83 New York, Chicago & St. Louis	27,811	14.98	10.75	89.25	24,173	13.00	7.26		92.74
85 Northern Pacific (1)									
86 Wisconsin Central Lines	67,421	16.15	40.03	59.97	64,723	15.51	28.36		71.64
88 Ohio & Mississippi	348,376	25.34	44.05	55.95	218,777	15.55	34.71		65.29
89 Pawnee	277	2.88	25.00	75.00	107	.91	25.00		75.00
90 Pennsylvania Co (1)									
92 Pittsburgh, Ft. W. & Chi.	89,195	8.55	39.10	60.90	237,275	22.74	25.41		74.59
93 South Chicago & Southern	4,936	21.35	73.72	26.28	1,906	8.24	43.48		56.52
94 Peoria & Pekin Union	97,727	24.71			28,708	7.26			
95 Peoria, Decatur & Evansville....	77,791	24.13	43.72	56.28	62,301	19.32	15.73		84.27
96 Pittsburg, Cin., Chi. & St. L..	75,800	11.40	31.12	68.88	60,582	9.11	24.48		75.52
97 Englewood Connecting	823	41.54		100.00					
99 Rock Island & Peoria	116,552	28.10	36.76	63.24	62,618	15.10	22.48		77.52
100 St. Louis, Alton & Springfield.	32,773	30.91			9,899	9.31			
101 St. Louis, Alton & Terre Haute	187,591	22.43	30.00	70.00	151,930	18.16	22.03		77.97

(1) Inserted to show relation of following subsidiary lines.

itures in Illinois.

A.—Operating Expenses.

10	11	12	13	14	15	16	17	18	19	20	21
EXPENDITURE ASSIGNABLE TO OPERATION.								SUMMARY OF OPERATING EXPENSES.			
CONDUCTING TRANSPORTATION				GENERAL EXPENSES.				Proportion of operating expenses to operating income			
Amount.	Proportion to total operating expenses, 100×Col. 10÷Col. 18.	Proportion assigned to		Amount.	Proportion to total operating expenses, 100×Col. 14÷Col. 18.	Proportion assigned to		Total operating expenses. Cols. 2+6+10+14.	Proportion assigned to		Proportion of operating expenses to operating income
		Passenger service	Freight service			Passenger service	Freight service		Passenger service	Freight service	
\$1,320,291	45.56	29.06	70.94	\$856,799	29.58	36.18	63.82	\$2,837,922	31.27	68.73	81.83
97,401	59.93	.....	.....	15,581	9.60	.....	.....	162,501	.....	.....	82.98
310,075	59.58	.....	100.00	38,369	7.40	.....	100.00	520,360	.....	100.00	65.84
6,812	52.81	50.00	50.00	750	5.80	50.00	50.00	12,951	49.36	50.04	113.72
1,795,137	50.03	30.74	69.26	555,516	15.49	48.31	51.66	3,587,999	35.24	64.76	56.72
72,926	60.98	.....	100.00	19,725	16.51	.....	100.00	119,571	.....	100.00	88.68
808,718	53.87	29.81	70.16	112,178	9.49	39.56	60.44	1,501,019	30.07	69.93	63.30
176,927	60.21	35.73	64.27	31,826	11.82	43.74	56.26	293,850	37.79	62.21	73.16
1,551,523	56.46	31.46	68.54	186,292	6.79	31.29	68.71	2,747,890	30.10	69.90	61.65
114,574	70.92	81.13	18.87	15,476	9.60	51.02	48.98	161,538	79.77	20.23	16.81
22,296	40.13	22.60	77.40	5,393	9.71	27.08	72.92	55,558	25.36	74.64	67.99
235,279	54.18	35.48	64.52	80,464	18.54	40.14	59.86	434,248	33.83	66.17	70.62
2,528,866	50.89	35.01	64.99	430,558	8.69	35.35	64.65	4,961,431	32.93	67.07	61.37
99,767	66.72	41.01	58.99	6,634	4.49	44.41	55.59	119,521	42.89	57.11	50.02
600,875	50.02	27.20	72.80	111,358	9.29	41.14	58.86	1,291,059	39.21	60.79	61.75
1,914,935	57.42	34.20	65.80	430,012	12.71	35.20	64.80	3,381,669	31.01	68.99	58.32
656,657	53.07	18.81	81.16	828,627	26.57	33.29	66.71	1,237,318	23.87	76.13	76.46
1,463,011	50.29	34.11	65.89	411,088	14.09	39.50	60.50	2,920,987	36.50	63.50	70.46
25,523	38.20	37.37	62.63	3,177	4.77	25.00	75.00	66,801	30.56	69.44	83.99
224,758	46.08	37.81	62.19	44,246	9.03	40.21	59.79	487,689	39.29	60.71	70.58
31,122	44.74	.....	100.00	4,705	6.81	.....	100.00	69,553	.....	100.00	88.92
100,395	58.26	.....	100.00	21,822	14.42	.....	100.00	172,307	.....	100.00	114.00
273,913	56.01	3.66	96.34	58,727	12.03	3.66	96.34	488,976	3.66	96.34	63.29
16,627	31.45	33.33	66.67	4,965	9.49	33.33	66.67	52,866	33.77	66.23	93.50
20,079	47.59	33.15	66.85	2,781	6.61	34.52	65.48	42,187	30.79	69.21	87.40
31,070	43.11	22.64	77.36	11,077	15.38	15.80	84.20	72,067	21.33	78.67	52.90
3,755,312	55.06	33.20	66.80	594,215	9.02	44.81	55.19	6,819,915	34.45	65.55	63.60
18,535	42.45	35.09	64.91	6,157	14.11	30.00	70.00	43,662	31.61	68.39	79.70
84,886	44.50	35.87	64.13	23,008	14.70	69.24	30.76	190,720	46.40	53.60	74.50
107,652	51.81	4.05	95.95	31,832	16.63	4.73	95.27	267,761	4.58	95.42	63.50
148,960	48.59	20.02	79.98	46,985	15.35	27.71	72.29	306,502	24.75	75.25	72.77
157,554	53.01	40.91	59.09	35,618	12.02	43.48	56.52	297,168	40.58	59.42	54.34
158,388	53.04	32.02	67.98	20,377	6.81	36.69	63.31	298,567	32.37	67.63	52.26
329,596	46.65	25.69	74.31	81,643	12.00	33.34	66.66	706,421	23.42	76.58	62.78
179,096	50.88	40.06	59.94	36,837	10.49	50.41	49.59	351,927	43.61	56.39	74.91
220,380	50.06	36.62	63.38	47,981	10.91	36.62	63.38	440,157	36.62	63.38	77.73
312,194	51.37	25.30	74.70	72,802	12.00	33.07	66.93	607,611	27.47	72.53	75.32
110,406	59.41	6.80	93.20	23,401	12.61	9.78	90.22	185,823	7.83	92.17	81.97
215,193	59.41	29.15	70.85	69,911	16.77	40.10	59.90	417,250	32.63	67.37	44.23
640,549	46.59	41.03	58.97	171,913	12.52	48.90	51.10	1,374,616	41.79	58.21	71.85
3,436	29.19	25.00	75.00	7,947	67.52	25.00	75.00	11,769	25.00	75.00	171.29
701,960	67.29	26.87	73.13	14,689	1.42	23.26	76.74	1,043,121	27.52	72.48	222.83
15,529	67.18	58.36	41.64	741	3.23	71.71	28.29	23,114	60.84	39.16	73.55
240,838	60.90	.....	.....	28,122	7.13	.....	.....	395,384	.....	.....	66.10
155,138	48.12	24.12	75.88	27,141	8.43	39.66	60.34	322,376	28.54	71.46	55.54
492,918	74.16	25.14	74.86	35,322	5.33	58.01	41.99	661,633	27.85	72.15	126.75
1,156	58.13	.....	100.00	6	.....	.....	100.00	1,988	.....	100.00	49.16
189,925	45.80	19.57	80.43	45,573	11.00	38.69	61.31	414,669	26.94	73.06	54.99
49,461	46.70	.....	.....	13,768	13.02	.....	.....	105,903	.....	.....	78.18
406,630	48.62	27.08	72.92	90,179	10.73	30.19	69.81	836,332	27.15	72.85	56.47

TABLE V—*Expend-*A.—*Operating Expenses.*

1	2	3	4	5	6	7	8	9
NAME OF COMPANY.	EXPENDITURE ASSIGNABLE TO OPERATION.							
	MAINTENANCE OF WAY AND STRUCTURES.				MAINTENANCE OF EQUIPMENT.			
	Amount.	Proportion to total operating expenses, 1000 X Col. 2÷ Col. 18.....	Proportion assigned to		Amount.	Proportion to total operating expenses, 1000 X Col. 6÷ Col. 18.....	Proportion assigned to	
			Passenger service.....	Freight service.....			Passenger service.....	Freight service.....
109 St. Loui. & Peoria	\$5,351	28.32	.....	100.00	\$2,716	14.37	.....	100.00
110 Terminal R. R. Ass'n of St. L..	46,930	15.36	25.00	75.00	29,666	9.71	15.20	84.80
112 Terre Haute & Indianapolis, ..	214,965	17.38	48.72	51.28	214,292	17.32	28.18	71.82
114 Terre Haute & Peoria.....	56,891	20.77	.....	.....	28,432	10.38	.....	.....
115 Toledo, Peoria & Western.....	172,071	23.40	41.22	58.78	83,094	11.30	22.14	77.86
116 Toledo, St. L. & Kansas City..	79,016	17.28	30.08	69.92	49,678	10.86	19.29	80.71
118 Wabash.....	705,787	19.54	33.71	66.29	687,907	19.05	28.40	71.60
121 Wabash, Chester & Western..	22,287	44.61	65.93	34.07	4,992	9.99	28.06	71.94
Total.....	\$9,490,843	18.80	36.94	63.06	\$8,155,071	16.16	26.56	73.44

itures in Illinois.—Continued.

A.—Operating Expenses.

10	11	12	13	14	15	16	17	18	19	20	21	
EXPENDITURE ASSIGNABLE TO OPERATION.								SUMMARY OF OPERATING EXPENSES.				
CONDUCTING TRANSPORTAT'N				GENERAL EXPENSES.				Total operating expenses. Cols. 2+6+10+14.	Proportion assigned to		Proportion of operating expenses to operating income	
Amount.	Proportion to total operating expenses, 100×Col. 10÷Col. 18.....	Proportion assigned to		Amount.	Proportion to total operating expenses, 100×Col. 14÷Col. 18.....	Proportion assigned to						
		Passenger service	Freight service			Passenger service	Freight service					
\$6,474	34.26	.....	100.00	\$4,351	23.05	.....	100.00	\$18,893	.....	100.00	63.24	109
204,422	66.91	14.23	85.77	21,459	9.02	21.27	78.73	305,479	16.54	83.46	44.94	110
699,228	55.81	31.99	68.01	117,084	9.49	46.56	53.44	1,236,571	35.62	64.38	66.16	112
114,913	41.96	.....	.....	73,605	26.89	.....	.....	273,812	.....	.....	72.00	114
337,338	45.88	25.94	74.06	112,682	19.42	39.12	60.88	735,186	31.37	68.63	72.23	115
254,588	55.69	20.07	79.93	73,796	16.17	27.40	72.60	457,089	22.90	77.10	73.39	116
1,949,044	53.97	25.43	74.57	268,102	7.44	42.58	57.42	3,610,842	28.88	71.12	75.28	118
18,025	36.08	53.79	46.21	4,652	9.32	65.93	34.07	49,957	57.76	42.24	66.68	121
\$26,754,898	53.02	29.95	70.05	\$6,056,462	12.02	38.09	61.91	\$50,457,276	31.53	68.47	65.98	

TABLE V.—General Expenditures in Illinois—Continued.

B.—Fixed Charges.

	22	23	24	25	26	
NAME OF COMPANY.	EXPENDITURE ASSIGNABLE TO FIXED CHARGES.					
	Amount. Cols. 23+ 24+25+26.	Designation.				
		Interest.	Rents.	Taxes.	Miscel- laneous.	
1 Atchison Topeka & Santa Fe (1).....						1
2 Chicago, Santa Fe & California.....	\$650,160	\$528,480		\$97,049	\$24,630	2
5 Baltimore & Ohio.....	27,368	12,145		15,222		5
7 Belt Railway of Chicago.....	150,020	4,375	\$112,344	33,300		7
8 Centralia & Chester.....	752			752		8
9 Chicago & Alton.....	1,066,285	684,075	176,750	205,459		9
10 Joliet & Chicago.....	750				750	10
11 Mississippi River Bridge.....	17,593	17,593				11
12 Chicago & Calumet Terminal.....	73,757	66,838		6,918		12
13 Chicago & Eastern Illinois.....	812,467	614,602	122,114	75,750		13
14 Chicago & Western Indiana.....	669,320	550,848			118,471	14
15 Evansville, Terre Haute & Chi.....	8,475	8,475				15
17 Chicago & Grand Trunk.....	147,224	74,667	17,956	49,902	4,687	17
18 Grand Trunk Junction.....	179,564	179,564				18
20 Chicago & Indiana State Line.....	28,374	16,066		3,088	9,219	20
21 Chicago & Northwestern.....	1,137,917	842,240		238,626	57,050	21
22 Chicago & Northern Pacific.....	1,201,100	1,167,416		33,684		22
23 Chicago & Ohio River.....	7,116	4,987		2,128		23
25 Chicago, Burlington & Northern.....	238,705	214,200		22,757	1,747	25
26 Chicago, Burlington & Quincy.....	2,025,171	1,500,844	68,467	308,242	147,617	26
27 Chicago & Iowa.....	188,377	169,422		18,954		27
28 Galesburg & Rio.....	16,999	14,628		2,371		28
29 Illinois Valley & Northern.....	80,115	69,792		10,323		29
30 Liverpool Coal.....	18,643			226	18,416	30
31 Quincy, Alton & St. Louis.....	42,000	42,000				31
32 St. Louis, Rock Island & Chicago.....	228,110	175,000		53,110		32
34 Chicago, Milwaukee & St. Paul.....	535,813	436,449		99,364		34
35 Chicago, Rock Island & Pacific.....	471,928	195,281	125,000	151,647		35
36 Peoria & Bureau Valley.....	1,102				1,102	36
37 Chicago, St. Paul & Kansas City.....	70,624	43,527		27,097		37
39 Cleveland, Cincinnati, Chi. & St. L.....	843,868	700,741		143,127		39
40 Kankakee & Seneca.....	49,065	39,000		10,065		40
41 Peoria & Eastern.....	202,736	157,170		33,567	11,998	41
42 DePue, Ladd & Eastern.....	249			249		42
43 East St. Louis & Carondelet.....	17,014	14,000		3,014		43
44 East St. Louis Connecting.....	21,642	19,914		1,727		44
45 Elgin, Joliet & Eastern.....	281,197	253,195		28,002		45
46 Fulton County Narrow Gauge.....	36,050	33,880		2,170		46
48 Grand Tower & Cape Girardeau.....	33,731	21,035		2,448	248	48
49 Grand Tower & Carbondale.....	4,890	673		4,317		49
50 Illinois Central.....	1,630,929	954,454		(2)645,905	30,569	50
51 Blue Island.....	2,500	2,500				51
52 Chicago, Havana & Western.....	125,000	125,000				52
58 Rantoul.....	50,000	50,000				58
59 South Chicago.....	10,000	10,000				59
61 Indiana & Illinois Southern.....	4,110	751		3,358		61
62 Indianapolis, Decatur & Western.....	81,719	66,440		15,279		62
63 Indiana, Illinois & Iowa.....	44,823	34,719		9,957	146	63
64 Iowa Central.....	90,892	58,429	15,176	14,445	2,840	64
72 St. Louis & Chicago.....	4,008				4,008	72
73 Lake Erie & Western.....	123,961	66,499		21,326	36,135	73
74 Lake Shore & Michigan Southern.....	111,660	33,559	5,824	61,509	10,766	74
75 Louisville & Nashville.....	305,330	260,190		45,140		75
77 Louisville, Evansville & St. L., Con.....	214,425	163,234	23,742	27,448		77
78 Michigan Central.....	91,283	14,833	57,355	19,093		78
79 Joliet & Northern Indiana.....	36,733	36,088			644	79
80 Mobile & Ohio.....	225,631	160,000	20,789	32,390	12,451	80
83 New York, Chicago & St. Louis.....	50,997	28,018	3	22,975		83
85 Northern Pacific (1).....						85
86 Wisconsin Central lines.....	623,172		599,588	23,490	93	86
88 Ohio & Mississippi.....	740,454	629,680		96,797	13,976	88

(1) Inserted to show relation of following subsidiary lines.

(2) Includes \$571,721.72, proportion of gross receipts due State of Illinois.

Table V.—General Expenditures in Illinois—Continued.

B.—Fixed Charges.

	22	23	24	25	26	
NAME OF COMPANY.	EXPENDITURE ASSIGNABLE TO FIPEd CHARGES.					
	Amount. Cols. 23+ 24+25+26.	Designation.				
		Interest.	Rents.	Taxes.	Miscel- laneous.	
89 Pawnee	\$532			\$379	\$153	89
90 Pennsylvania Co. (1)						90
91 Calumet River	3,250	3,250				91
92 Pitts., Ft. Wayne & Chi. (O & F.)	174,083		102,767	71,315		92
92 Pitts., Ft. Wayne & Chi. (F.)	30,332	29,572			759	92
93 South Chi. & Southern (O. & F.)	8,313		5,674	2,639		93
93 South Chi. & Southern (F.)	6,250	6,250				93
94 Peoria & Pekin Union	88,101	29,897	7,418	24,182	21,603	94
95 Peoria, Decatur & Evansville	260,681	206,758	19,950	28,373	5,600	95
96 Pitts., Cincinnati, Chicago & St. L.	123,197	61,266	138	59,320	2,472	96
97 Englewood (connecting (O & F))	2,056		138	1,918		97
99 Rock Island & Peoria	69,154	42,000		27,153		99
100 St. Louis, Alton & Springfield	28,975	17,999		6,400	4,574	100
101 St. Louis, Alton & Terre Haute	1,058,795	478,066	404,649	43,854	127,224	101
102 Belleville & Carondelet	29,100	29,100				102
103 Belleville & Eldorado	35,219	35,200			19	103
104 Belleville & Southern Illinois	94,375	81,160			13,215	104
105 Chicago, St. Louis & Paducah	50,000	50,000				105
106 St. Louis Southern	57,524	47,300	10,000		224	106
107 Carbondale & Shawneetown	10,000	10,000				107
109 St. Louis & Peoria	14,125	12,925		1,200		109
110 Terminal Railroad Asso. of St. L.	481,710	18,675	412,389	31,604	22,041	110
111 St. Louis Bridge	246,750	245,000			1,750	111
112 Terre Haute & Indianapolis (1)						112
113 St. Louis, Vandalia & Terre H.	377,800	314,930		55,964	6,906	113
114 Terre Haute & Peoria	105,007	90,000		15,007		114
115 Toledo, Peoria & Western	233,646	197,400		36,246		115
116 Toledo, St. Louis & Kansas City	182,118	156,993		25,125		116
118 Wabash	1,329,828	939,691	174,616	200,029	15,490	118
121 Wabash, Chester & Western	19,951	17,068		2,882		121
Totals	\$21,228,830	\$14,669,947	\$2,482,858	\$3,350,990	\$725,034	

TABLE V.—General Expenditures in Illinois—Continued.

C.—Summary of Operating Expenses and Fixed Charges.

	27	28	29	30	31	32	33	34	
SUMMARY AND DEDUCTIONS.									
NAME OF COMPANY.	Total of operating expenses and fixed charges, Cois. 18+22	Proportion assignable to fixed charges, 100× Col. 28÷Col. 27	Proportion assignable to operation, 100× Col. 18÷Col. 27	Cost of carrying one passenger one mile.	Cost of running passenger train one mile, <i>Dollars and Cents</i> .	Cost of carrying one ton of freight one mile, <i>Cents</i> .	Cost of running freight train one mile, <i>Dollars and Cents</i> .	Average cost per train mile of all trains earning revenue, <i>Dollars and Cents</i> .	
1 Atehs'n, Topka & Santa F. (4)									1
2 Chicago, Santa Fe & Cal.	\$3,548,082	81.67	18.33	4.030	.95712	.659	1.20535	1.1187	2
3 Baltimore & Ohio	181,872	85.59	14.41					1.1033	3
4 Belt Railway of Chicago	670,381	77.62	22.38				.4261	.424	4
5 Centralia & Chester	13,707	94.51	5.49	4.28		4.06		.36501	5
6 Chicago & Alton	4,651,281	77.67	22.33	1.421	.85331	.538	.87392	.89661	6
7 Joliet & Chicago	750		100.00						7
8 Mississippi River Bridge	17,593		100.00						8
9 Chi. & Calumet Terminal	193,329	61.84	38.16						9
10 Chicago & Eastern Illinois	2,313,487	64.88	35.12	1.318	.76915	.317	1.15531	1.00377	10
11 Chi. & Western Indiana	661,320		100.00						11
12 Evansville, Terre H. & Chi.	8,475		100.00						12
13 Chicago & Grand Trunk	441,074	66.62	33.38	.810	.50693	.455	.88847	.65184	13
14 Grand Trunk Junction	179,564		100.00						14
15 Chi. & Indiana State Line	28,371		100.00						15
16 Chicago & Northwestern	3,885,807	70.71	29.29	1.740	.7574	.600	.88764	.8205	16
17 Chicago & Northern Pacific	1,362,639	11.85	88.15						17
18 Chicago & Ohio River	62,675	88.61	11.39	1.83167	.76282	2.037	.83121	.81275	18
19 Chi., Burlington & Northern	672,954	61.43	38.57		.90130		.93896	.89063	19
20 Chi., Burlington & Quincy	6,989,693	71.02	28.98						20
21 Chicago & Iowa	337,901	41.25	58.75	3.159	.60455	.543	.65661	.61671	21
22 Galesburg & Rio	16,999		100.00						22
23 Illinois Valley & Northern	89,115		100.00						23
24 Liverpool Coal	18,643		100.00						24
25 Quincy, Alton & St. Louis	42,009		100.00						25
26 St. L., Rock Island & Chi.	228,116		100.00						26
27 Chi., Milwaukee & St. Paul	1,736,872	70.92	29.08	2.244	.81666	.617	.98568	.80432	27
28 Chi., Rock Island & Pacific	3,858,597	87.76	12.24	1.639	.92613	.567	.97569	.95824	28
29 Peoria & Bureau valley	1,102		100.00						29
30 Chi., St. Paul & Kansas City	1,807,943	94.60	5.40	2.665	.92021	.635	1.19285	1.11406	30
31 Cleve., Cin., Chi. & St. Louis	3,764,856	77.58	22.42	2.063	.81688	.481	1.01631	.94714	31
32 Kankakee & Seneca	115,869	57.65	42.35	1.521		.610		1.09657	32
33 Peoria & Eastern	690,425	70.63	29.37	2.233	.73517	.421	.88196	.81936	33
34 De Pue, Ladd & Eastern	249		100.00						34
35 East St. Louis & Carondelet	86,568	80.34	19.66						35
36 East St. Louis Connecting	193,949	88.81	11.16						36
37 Elgin, Joliet & Eastern	770,173	63.48	36.52	2.627		.481	1.06750	.94563	37
38 Fulton Co. Narrow Gauge	88,916	59.45	40.55	2.527	.46754	1.030	.79238	.64179	38
39 Grand Tower & C. Girardeau	65,919	63.99	36.01	5.319	.48639	.678	.70919	.62160	39
40 Grand Tower & Carbondale	76,958	93.64	6.36	2.997	.70698	.813	1.20235	.81596	40
41 Illinois Central	8,450,875	80.70	19.30	1.757	.66382	.516	.83021	.76422	41
42 Blue Island	2,500		100.00						42
43 Chi., Havana & Western	125,000		100.00						43
44 Rantoul	50,000		100.00						44
45 South Chicago	10,000		100.00						45
46 Indiana & Illinois Southern	47,772	91.39	8.61	3.028	.40704	1.400	.84310	.62900	46
47 Indian P'lis, Decatur & West.	272,440	70.00	30.00	2.779	.61347	.845	1.04238	.78712	47
48 Indiana, Illinois & Iowa	252,585	82.25	17.75	1.591		.563	1.2014	.88136	48
49 Iowa Central	397,391	77.12	22.88	3.459	.69393	.716	.92504	.83289	49
50 St. Louis & Chicago	4,008		100.00						50
51 Lake Erie & Western	421,129	70.56	29.44	1.971	.5379	.3575		.70873	51
52 Lake Shore & Mich. South'n	410,228	72.78	27.22	.925	.4988	.593	2.61361	1.10166	52
53 Louisville & Nashville	1,011,755	69.42	30.58	1.706	.75712	.560	1.06479	.91622	53
54 Louisv., Evansv. & St. L. Con.	566,352	62.13	37.87	2.392	.71877	.698	1.03678	.86898	54
55 Michigan Central	531,440	81.82	18.18	2.025	.98115	.604	.98114	.98105	55
56 Joliet & Northern Indiana	36,743		100.00						56
57 Mobile & Ohio	833,273	72.92	27.08	2.990	.60607	.555	.78203	.72437	57

(4) Inserted to show relation of following subsidiary lines.

TABLE V.—General Expenditures in Illinois—Concluded.

C.—Summary of Operating Expenses and Fixed Charges.

	27	28	29	30	31	32	33	34
NAME OF COMPANY.	SUMMARY AND DEDUCTIONS.							
	Total of operating expenses and fixed charges, Cols. 18+22	Proportion to operation, 100×Col. 18÷Col. 27	Proportion assignable to fixed charges, 100×Col. 22÷Col. 27	Cost of carrying one passenger one mile, Cents	Cost of running passenger train one mile, Cents	Cost of carrying one ton of freight one mile, Cents	Cost of running freight train one mile, Cents	Av. cost per train mile of all trains earning revenue, Dollars and Cents
83 New York, Chicago & St. L.	\$236,820	78.46	21.54	2.762	1.10138	1.282	2.65551	2.39120
85 Northern Pacific ⁽⁴⁾								
86 Wisconsin Central Lines..	1,040,422	40.10	59.90	1.518	.65783	.496	.99417	.85199
88 Ohio & Mississippi	2,115,070	64.99	35.01	1.992	.86103	.631	.94637	.91039
89 Pawnee.....	12,302	95.67	4.33	5.245	.86924	1.053	.86924	.86924
90 Pennsylvania Co. ⁽⁴⁾								
91 Calumet River	3,250		100.00					
92 Pittsb., Ft. W. & Chi.(O. & F.)	1,217,214	85.69	14.31	6.266	2.87304	1.906	4.94218	4.12456
93 Pittsburg, Ft. W. & Chi (F.)	30,332		100.00					
93 So. Chi. & Southern(O. & F.)	31,427	73.54	26.46	1.401	.52367	1.216	.99558	.64298
93 South Chi. & Southern (F.)	6,250		100.00					
94 Peoria & Pekin Union	478,486	82.63	17.37					
95 Peoria, Decatur & Evansville	583,058	55.29	44.71	1.826	.32652	.575	1.21235	.71229
96 Pittsb., Cin., Chi. & St. Louis	787,830	84.36	15.64	5.020	1.80030	1.229	2.60777	2.31819
97 Engle'w'd Connect'g(O. & F.)	4,045	49.15	50.85					
99 Rock Island & Peoria	483,824	85.76	14.24	2.452	.97986	.703	1.12084	.97199
100 St. Louis, Alton & Springfield	131,879	71.10	28.90					
101 St. L., Alton & Terre Haute.	1,830,127	44.21	55.76	1.939	.73394	.549	1.49944	1.11262
102 Belleville & Carondelet ...	29,100		100.00					
103 Belleville & Eldorado.....	35,219		100.00					
104 Belleville & Southern Ill..	91,375		100.00					
105 Chi., St. Louis & Paducah.	50,000		100.00					
106 St. Louis Southern.....	57,524		100.00					
107 Carb'nd'le & Shawneet'n.	10,000		100.00					
109 St. Louis & Peoria.....	33,018	57.22	42.78			1.184	2.15580	2.15580
110 Terminal R. R. Ass. of St. L.	790,189	38.65	61.35	1.012		4.696		
111 St. Louis Bridge	246,750		100.00					
112 Terre Haute & Indianapolis.	1,236,571	100.00		2.339	.60619	.603	.95592	.78294
113 St. L., Vandalia & Terre H.	377,890		100.00					
114 Terre Haute & Peoria.....	378,859	72.27	27.73					
115 Toledo, Peoria & Western ..	968,832	75.88	24.12	2.045	.78557	1.150	1.23410	.93712
116 Toledo, St. L. & Kansas City	639,199	71.50	28.50	2.325	.52932	.332	.82902	.73385
118 Wabash.....	4,940,671	73.75	26.25	1.830	.66381	.554	1.02684	.88674
121 Wabash, Chester & Western	69,909	71.46	28.54	3.970	.61373	.994	1.03449	.67787
Totals.....	\$71,686,106	70.38	29.62	1.9153	.76876	.56808	1.01157	.90699

⁽⁴⁾ Inserted to show relation of following subsidiary lines.

TABLE VI.—Passenger and Freight Traffic in Illinois, for year ending June 30, 1892.

NAME OF COMPANY.	PASSENGER TRAFFIC.						FREIGHT TRAFFIC.						12	13	14	15
	2	3	4	5	6	7	8	9	10		11					
									Freight earnings per mile of road..	Average amount received for each ton of freight. Dollars and cents						
	Number of pas- sengers carried earning revenue.	Number of pas- sengers carried one mile.....	Average distance carried, in miles.	Average amount received from each passenger. Dollars and cents	Passenger earnings per mile of road	Number of tons of freight carried earning revenue.	Number of tons carried one mile.	Average distance haul of one ton, in miles	Average amount received for each ton of freight. Dollars and cents	Freight earnings per mile of road..	Gross earnings from operation per mile of road	Expenses per mile of road	Net earnings per mile of road. Cols.12-13...	Net loss per mile of road		
1 Atchison, Topeka & Santa Fe (1).....	372,301	22,484,453	60.39	\$1.3091	\$2.1775	1,981,085	302,336,029	152.60	\$1.43297	\$9.639	\$12,012	\$9,830	\$2,182		1	
2 Chicago, Santa Fe & California.....	133,781	2,418,423	18.10	.3501	2.198	1,439,955	26,548,034	18.40	.00562	5.256	7,454	6,185	1,268		2	
3 Belt Railway of Chicago.....										36,592	36,592	24,418	12,173	\$62	3	
4 Centralia & Chester.....	9,439	151,024	16.00	.3750	3.627	10,556	168,896	16.00	.63400	263	455	518			4	
5 Chicago & Alton.....	1,756,636	89,004,961	50.67	1.0346		3,353,151	431,636,831	128.73	1.24293	7,176	10,800	6,177	4,712		5	
6 Chicago & Calumet Terminal.....										1,763	10,800	6,177	4,712		6	
7 Chicago & Eastern Illinois.....	2,570,187	34,257,692	13.30	.2062	2.713	2,190,598	287,630,700	127.30	.77938	5,437	10,719	6,785	3,934		7	
8 Chicago & Grand Trunk.....	2,741,958	18,799,683	18.50	.204	6.809	1,310,425	40,112,100	30.60	.2008	8,969	15,878	9,587	2,866		8	
9 Chicago & Northwestern.....	2,119,974	47,552,740	22.43	.8556	2.017	2,191,877	319,961,769	146.00	1.47895	5,465	7,503	4,926	2,877		9	
10 Chicago & Northern Pacific.....	1,561,622			.0859	5.190						36,748	6,177	30,570		10	
11 Chicago & Ohio River.....	32,072	478,622	14.92	.444	1.119	653,292	2,036,125	32.00	.99236	735	5,635	650	3,506		11	
12 Chicago & Burlington & Northern.....	92,373	5,219,480	57.00	1.1357	1.636	2,186,412	63,448,725	62.00	.47536	1,434	5,638	3,970	1,656		12	
13 Chicago, Burlington & Quincy.....	1,746,635									1,858	5,738	3,649	2,068		13	
14 Chicago & Iowa.....	118,517	3,241,248	27.00	.632	1.524	462,470	25,089,783	54.00	.41783	1,858	2,874	3,475	2,153		14	
15 Chicago, Milwaukee & St. Paul.....	481,614	16,249,061	33.74	.8315	1.524	694,136	135,959,638	135.87	2.00835	4,066	5,629	3,475	2,153		15	
16 Chicago, Rock Island & Pacific.....	2,663,383	70,271,856	26.00	.50	6.664	3,774,075	383,996,685	104.00	1.07	17,165	24,587	14,389	40,000		16	
17 Chicago, St. Paul & Kansas City.....	166,694	11,081,427	66.48	1.3509	1.926	961,029	148,365,823	154.36	1.33384	7,446	9,399	7,187	2,212		17	
18 Cleveland, Cincinnati, Chicago & St. L.....	1,580,451	51,680,981	82.70	.7259	2.806	2,557,196	385,498,554	150.91	1.07090	5,673	8,704	6,133	2,571		18	
19 Kankakee & Seneca.....	26,241	451,287	17.19	.4577		386,276,773	7,599,070	27.46	.22821	1,501	1,763	1,481	282		19	
20 Peoria & Eastern.....	232,353	8,358,655	35.97	.8925	1.868	471,006	69,735,965	148.06	.93693	3,555	5,257	3,710	1,546		20	
21 East St. Louis & Caron-tel.....										4,479	51,281	6,512	5,791	721	21	
22 East St. Louis Connecting.....										44,730	51,281	6,512	5,791	721	22	
23 Elgin, Joliet & Eastern.....	38,325	681,909	17.78	.4943	1.18	1,900,236	97,885,372	49.94	.37117	4,557	4,838	3,662	1,775	45	23	
24 Fulton County Narrow Gauge.....	34,275	706,375	20.63	.4138	338	155,680	3,396,430		.61489	588	927	866	60	46	24	
25 Grand Tower & Cape Girardeau.....	12,890	243,961	18.93	.8879	292	155,345	4,392,006	27.69	.25642	1,383	1,675	1,464	210	48	25	
26 Grand Tower & Carbondale.....	41,167	513,128	12.46	.3342	473	443,312	6,970,252	15.72	.26425	3,560	4,138	2,190	1,948	48	26	
27 Illinois Central.....	10,139,491	133,748,754	13.19	.2582	2,449	6,311,389	865,874,208	137.19	1.09155	5,351	8,313	5,287	3,026	50	27	
28 Indiana & Illinois Southern.....	30,385	455,778	15.00	.4038		76,153	2,132,284	28.00	.47740	5,673	1,013			50	28	

62	Indianapolis, Decatur & Western	110,071	3,183,753	28,981	68,007	1,293	197,716	12,100,218	61,20	81,362	2,118	8,357	2,501	855	62
63	Indiana, Illinois & Iowa	92,417	395,057	17,70	4,466	293	949,490	33,278,057	37,20	37,61	3,415	4,682	2,940	1,691	63
64	Iowa Central	125,990	2,194,021	17,40	4,276	692	196,591	42,183,883	65,00	17,026	4,821	4,516	3,286	1,223	64
73	Lake Erie & Western	241,161	6,119,337	25,38	6,139	1,416	3,190,328	34,063,916	10,80	1,09403	2,865	4,513	2,256	963	73
74	Lake Erie & Michigan Southern	1,856,989	10,449,123	4,12	1,119	9,990	1,054,484	90,224,907	85,60	963	29,464	40,743	21,256	19,453	74
75	Louisville & Nashville	308,024	11,774,343	38,20	958	2,007	3,200,420	29,691,161	92,66	707	4,128	6,172	3,913	2,259	75
77	Louisville, Evansville & St. Louis, Con	210,663	5,798,311	27,52	669	1,318	3,200,420	29,691,161	92,66	94082	2,458	3,830	2,869	961	77
78	Michigan Central	391,536	7,961,371	29,33	455	3,835	2,291,061	46,492,210	20,00	1,6629	7,764	11,599	8,969	2,629	78
80	Mobile & Ohio	177,705	5,583,176	31,40	7104	1,087	7,024,481	79,375,011	113,00	89568	3,917	5,023	3,783	1,239	80
83	New York, Chicago & St. Louis	27,945	527,040	18,86	5487	888	1,153,569	13,363,922	12,00	13175	11,116	12,020	9,852	2,167	83
85	Northern Pacific (?)									6203	10,427	14,853	6,569	8,283	85
86	Wisconsin Central Lines	242,284	8,968,724	37,02	8719	4,254	1,067,677	56,701,677	53,11			5,101	3,660	1,440	86
88	Ohio & Mississippi	541,177	28,846,900	52,71	1,1357	2,027	980,639	126,080,481	129,26	1,1768	3,073	981	1,681		88
89	Pawnee	8,040	56,280	7,00	1,759	202	11,966	83,762	7,00	42200	721			699	89
90	Pennsylvania Co. (?)														90
92	Pittsburgh, Ft. Wayne & Chicago	152,250	4,582,141		6367	7,793	261,540	39,668,230		1,0292	18,249	31,756	70,720	38,963	92
93	South Chicago & Southern	230,423	1,003,684	4,35	0700	1,574	127,338	744,234	5,85	1161	1,419	3,006	2,255	811	93
94	Peoria & Pekin Union					1,107	182,317			3,278	3,278	38,208	21,483	11,254	94
95	Peoria, Decatur & Evansville	212,080	5,031,017	23,76	0491	909	339,707	40,038,570	117,84	1,11026	2,099	8,231	1,794	1,436	95
96	Pittsburgh, Cincinnati, Chicago & St. L	150,553	3,687,489		5591	3,943	239,360	39,314,264		1,03403	9,582	18,734	23,734		96
97	Englewood Connecting											1,721	831	879	97
99	Rock Island & Peoria	216,022	4,557,677	21,10	5812	1,268	747,300	43,089,318	57,66	82405	5,449	6,733	3,669	3,063	99
100	St. Louis, Alton & Springfield	397,768	11,712,760	29,00	6898	1,371	1,811,827	110,959,553	61,00	0730	4,063	1,308	1,069	2,988	100
101	St. Louis, Alton & Terre Haute						113,941	1,595,174	14,00	25960	2,113	6,195	3,498	2,696	101
109	St. Louis & Peoria	1,421,717	2,161,009	1,52	1,093	124593	3,570,510	5,427,175	1,52	1,2615	2,461	2,113	1,349	763	109
110	Terminal Railroad Ass'n of St. Lo'is					1,0958	4,523	1,534,244		74778	7,245	453,708	200,973	25,2735	110
112	Terre Haute & Indianapolis	410,771	18,837,011	45,86		720	351,959	132,085,822	86,10			11,804	7,809	3,995	112
114	Terre Haute & Peoria	155,980										2,192	1,582	609	114
115	Toledo, Peoria & Western	522,457	11,280,963	21,59	5258	1,962	647,730	43,869,595	67,72	96359	2,547	4,118	2,975	1,143	115
116	Toledo, Peoria & Western	125,397	4,502,187	35,90	6750	237	446,462	106,038,032	297,50			1,383	1,014	369	116
118	Wabash, St. Louis & Kansas City	1,275,583	56,733,689	44,50	9149	2,237	2,309,350	463,503,387	200,00	1,4147	5,241	7,478	5,630	1,848	118
121	Wabash, Chester & Western	45,770	726,908	15,88	4433	604	87,483	2,121,564	24,25	56364	1,166	1,772	1,182	590	121
Totals		36,282,537	729,663,484	24,44	5116	82,144	59,41,336	5,246,210,552	91,92	79216	85,293	57,772	55,128	82,644	

88 Ohio & Mississippi.....	7,240	52,372	1,400	8,741	8,948	29,253	1,488	39,462	26,193	1,765	88
89 Pawnee.....	5	11,578	1,718	3,394	12,249	7,025	404	259	1,085	941	89
90 Pennsylvania Co. (1).....	5,084	834	147	1,530	8,278	52,657	260	57	857	163	90
92 Pittsburgh, Ft. Wayne & Chicago.....	6,423	608	95	2,107	192	8,177	1,616	82	64	40	92
93 South Chicago & Southern.....	75	14,752	3,562	5,209	8,521	6,780	1,629	1,888	24,847	2,726	93
94 Peoria & Pekin Union.....	3,147	5,744	1,180	1,246	6,015	10,176	1,286	497	2,402	1,135	94
95 Peoria, Decatur & Evansville.....	4,657	4,949	16,732	1,404	28,955	24,480	5,405	2,121	2,358	1,879	95
96 Pittsburgh, Cincinnati, Chicago & St. Louis.....	13,502	174,252	15,111	33,381	27,085	19,628	1,463	2,745	9,168	2,811	96
99 Rock Island & Peoria.....	57,856	15,111	12,509	19,863	27,085	40,170	.....	.....	6,347	.....	99
101 St. Louis, Alton & Terre Haute.....	12,985	4,986	6,241	.....	.....	38,168	13,943	14,316	12,147	4,242	101
112 Terminal Railroad Association of St. Louis.....	1,088	4,986	6,241	.....	.....	38,168	13,943	14,316	12,147	4,242	112
111 Terre Haute & Indianapolis.....	9,709	856	2,160	8,303	2,316	6,443	2,008	1,749	1,334	10,231	111
115 Toledo, Peoria & Western.....	7,175	1,254	5,800	28,875	8,144	11,108	6,927	1,761	16,337	4,713	115
116 Toledo, St. Louis & Kansas City.....	21,047	11,007	9,416	19,800	.....	8,144	2,187	560	1,031	882	116
118 Wabash.....	90	1,665	.....	2,095	.....	42,330	7,492	5,139	16,782	5,112	118
121 Wabash, Chester & Western.....	.....	.....	.....	.....	.....	5,575	134	.....	360	196	121
Totals.....	840,876	1152,813	348,661	768,033	623,897	1209,043	338,518	426,868	358,667	196,748	150,109

(1) Inserted to show relation of following subsidiary lines.

Table VII.—Classified Freight Traffic in Illinois, 1892—Concluded.

NAME OF COMPANY.	PRODUCTS OF MINES.										36	37	38						
	28	29	30	31	32	33	Products of forest.....			Merchandise....				Ice	Miscellaneous...	Total tonnage, Cols. 2 to 37 inclusive			
							Anthracite coal.....	Bituminous coal.....	Coke.....								Ores.....	Stone, sand and other like articles	Salt
1 Atchison, Topeka & Santaife (1).....														1,981,065	9,599		1		
2 Chicago, Santa Fe & California.....														1,439,955	122,851		2		
5 Baltimore & Ohio	19,825	256,170	133,237	18,846	253,891	4,810	7,796	134,307	128,144	37,555	953			1,439,955	122,851		5		
8 Centralia & Chester.....		550				45						13		10,556	417		8		
9 Chicago & Alton.....	10,088	1,063,385		8,633	178,021	4,816			201,140	86,776				945,414	95,541		13		
13 Chicago & Eastern Illinois.....	9,510	1,220,911	617	6,870	79,10	7,164			291,478	45,442				88,095	83,541		19		
17 Chicago & Grand Trunk.....	49,216	3,001	57	7,876	32,923	25,250			40,866					183,367	107,994		37		
21 Chicago & Northwestern.....	245,899	494,311	91,677	37,316	405,120	49,220			427,034					1,310,495	257,496		39		
23 Chicago & Ohio River.....	21	11,353							524,826	114,047				342,112	3,319		41		
25 Chicago, Burlington & Northern.....									16,383					1,683,992	56,970		43		
26 Chicago, Burlington & Quincy.....														1,016,807	1,805,996		45		
27 Chicago & Iowa.....														2,186,412	471,006		47		
31 Chicago, Milwaukee & St. Paul.....	21,694	53,211	4,154	4,160	27,116	3,611			113,552	40,481				462,470	471,006		49		
35 Chicago, Rock Island & Pacific.....	75,188	315,753	25,009	39,707	272,504	36,418			214,630	45,892				694,136	471,006		51		
37 Chicago, St. Paul & Kansas City.....	22,536	155,677	1,701	5,408	7,901	6,113			26,655	4,330				83,541	471,006		53		
39 Cleveland, Cincinnati, Chicago & St. Louis.....	58,115	556,063	22,614	25,892	140,385	15,483			319,442	378				107,994	471,006		55		
40 Banka & Seneca.....	2,351	23,469	3,701	78	2,218	2,229			34,949	17,544				961,169	471,006		57		
41 Peoria & Eastern.....	8,013	89,569	6,859	637	5,673	1,698			50,636	30,660				257,496	471,006		59		
46 Elgin, Joliet & Eastern.....	7,738	553,746	101,350	175,744	171,111	127			25,648	31,811				276,773	471,006		61		
48 Fulton County Narrow Gauge.....		36,578			230	121			1,788	7,708				471,006	471,006		63		
49 Grand Tower & Cape Girardeau.....	58	118,884	84		4,915	63			17,742	2,718				471,006	471,006		65		
50 Grand Tower and Carbonade.....	58	388,907	83		6,747	91			24,382	2,718				471,006	471,006		67		
51 Illinois Central.....	109,815	1,808,635	13,902	19,737	152,892	43,575			765,546	31,545				6,311,399	471,006		69		
61 Indiana & Illinois Southern.....		37,977							7,668	7,481				1,997	471,006		71		
62 Indianapolis, Decatur & Western.....	320	19,987			7,655				19,447	35,042				197,716	471,006		73		
63 Indiana, Illinois, & Iowa.....	40,325	9,956	88	26,940	3,961				15,328	14,708				949,430	471,006		75		
64 Iowa Central.....	13,892	150,454	1,221		2,063	1,214			7,390	1,273				496,591	471,006		77		
72 Lake Erie & Western.....	9,216	9,976	1,539		23,222	3,353			51,997					328,036	471,006		79		
73 Lake Shore & Michigan Southern.....	200,917	181,394	397,816	110,562	313,438	18,705			73,701	14,510				3,150,328	471,006		81		
75 Louisville & Nashville.....		251,958			7,751	803			70,185					878,910	471,006		83		
77 Louisville & Evansville.....	4,499	447,345	39,639	1,743	49,622				90,385					961,257	471,006		85		
78 St. Louis, Consolidated.....	153,076	58,982	39,225	103	165,136	79,200			125,491	13,966				2,911,065	471,006		87		
80 Mobile & Ohio.....		181,653							139,463	236,861				702,484	471,006		89		

85 New York, Chicago & St. Louis.....	180,875	11,818	17,501	6,404	9,471	50,951	110,266	427	156,669	1,153,569	88
86 Northern Pacific (td.).....	6,324	36,553	114,684	37,288	1,423	167,404	56,522	200,899	91,666	1,067,677	86
88 Wisconsin Central Lines.....	11,311	331,448	10,751	17,863	.....	71,006	63,918	.....	61,487	979,200	88
89 Ohio & Mississippi.....	.....	3,330	.....	.....	45	782	383	7	.....	11,966	89
90 Pawnee.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
91 Pennsylvania Co. ⁽¹⁾	91
92 Pittsburgh, Ft. Wayne & Chicago.....	3,017	40,135	32,537	20,216	.....	13,076	2,786	.....	95,215	261,539	92
93 South Chicago & Southern.....	318	3,259	4,749	4,093	.....	7,538	2,470	.....	30,241	127,338	93
94 Peoria & Pekin Union.....	281	156,162	1,597	4,806	68	1,520	4,527	119	1,812	182,317	94
95 Peoria, Decatur & Evansville.....	4,179	94,973	189	3,691	.....	64,945	13,314	.....	15,211	485,382	95
96 Pittsburg, Cincinnati, Chicago & St. Louis.....	7,538	48,713	13,276	14,143	.....	26,189	3,310	.....	59,619	251,860	96
97 Rock Island & Peoria.....	18,505	217,993	4,143	2,087	1,462	67,570	46,805	20,559	67,008	747,860	97
101 St. Louis, Alton & Terre Haute.....	882	955,487	8,766	19,284	11,911	275,951	82,880	2,084	49,470	1,811,527	101
102 St. Louis & Peoria.....	113,371	.....	.....	.....	.....	.....	570	.....	.....	113,941	102
103 Terminal Railroad Association of St. Louis.....	133,510	1,314,643	22,543	189,385	.....	175,662	94,862	.....	419,591	3,570,510	103
104 Terre Haute & Indianapolis.....	21,132	502,047	68,721	25,641	.....	85,348	89,074	.....	197,144	1,534,214	104
111 Terre Haute & Peoria.....	910	40,017	152	4,596	848	20,422	81,912	669	8,368	351,959	111
115 Toledo Peoria & Western.....	23,392	135,649	2,576	10,503	5,279	23,134	13,213	.....	13,549	617,730	115
116 Toledo, St. Louis & Kansas City.....	17,564	61,287	792	9,587	7,318	48,575	27,651	.....	89,489	446,462	116
118 Wabash.....	28,670	510,240	7,964	57,528	.....	189,474	155,626	.....	273,912	2,309,351	118
121 Wabash, Chester & Western.....	80	27,852	1,769	17,925	180	4,579	2,553	426	821	87,483	121
Totals.....	1,527,468	13,319,533	749,334	2,893,762	341,143	4,527,671	3,534,774	531,049	8,766,047	62,021,974	

⁽¹⁾ Inserted to show relation of following subsidiary lines.

year ending June 30, 1892—In Illinois and Whole Line.

11	12	13	14	15	16	17	18	19	20	21	22
ILLINOIS.										WHOLE LINE.	
Carpenters,.....	Other shopmen.	Section foremen.	Other trackmen.	Switchmen, flagmen and watchmen.....	Telegraph operators and dispatchers.....	Employees, account floating equipment.....	All other employees and laborers.....	Grand total, cols. 2 to 18 inclusive	Total yearly compensation.	Grand total,.....	Total yearly compensation.
11	301	67	916	212	39	.....	118	2,637	\$1,414,673 88	4,842	\$2,379,701 16
34	6	5	36	151	13	.....	253	656	383,051 56	1,939	1,178,881 42
11	42	6	26	9	17	.....	94	465	327,986 45	465	327,986 45
.....	1	.....	.....	.....	.....	.....	.....	32	11,235 90	32	11,235 90
24	445	117	610	272	81	.....	147	3,485	2,322,588 58	4,470	2,949,854 29
.....	.....	.....	.....	.....	.....	.....	.....	2	750 00	2	750 00
9	11	7	13	3	6	.....	1	121	84,473 64	121	84,473 64
71	267	45	153	113	34	.....	237	1,683	1,121,811 00	2,255	1,440,944 28
26	.....	21	293	157	22	.....	8	687	384,358 30	687	384,358 30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,274	1,367,496 78
18	16	7	34	22	10	.....	24	269	167,032 45	2,690	1,670,324 53
.....	.....	1	8	5	.....	.....	2	22	9,139 36	22	9,139 36
671	1,094	140	986	727	132	.....	658	8,068	5,059,346 04	21,149	13,015,477 76
5	2	13	24	.....	2	.....	1	86	32,448 96	86	32,448 96
5	32	18	130	11	15	.....	10	296	152,934 32	1,355	864,220 68
555	1,358	210	1,808	712	220	.....	236	9,182	5,495,637 31	21,634	13,071,129 10
.....	.....	17	50	.....	13	.....	5	228	64,792 93	228	64,792 93
37	149	76	208	73	50	.....	260	1,285	795,467 88	21,420	13,257,797 99
287	485	68	554	390	51	.....	145	3,738	2,400,996 60	12,509	7,608,141 96
.....	.....	.....	.....	.....	.....	.....	.....	4	600 00	4	600 00
7	52	25	113	14	17	.....	86	628	435,003 75	3,048	2,080,397 91
162	201	95	331	186	102	.....	338	3,166	1,846,425 36	9,270	5,956,757 91
.....	.....	7	12	.....	.....	.....	.....	40	21,139 94	40	21,139 94
35	34	24	58	15	15	.....	54	417	253,166 08	1,089	675,109 56
1	.....	2	17	5	2	.....	7	62	41,936 20	62	41,936 20
14	29	4	31	31	2	.....	19	195	133,223 25	195	133,223 25
16	85	25	120	50	18	.....	6	532	343,722 62	576	361,049 00
2	.....	8	24	.....	.....	.....	4	57	27,425 11	57	27,425 11
2	4	4	14	2	1	.....	3	56	26,662 48	56	26,662 48
4	19	4	14	4	1	.....	4	93	54,372 68	93	54,372 68
453	1,326	256	1,626	498	197	.....	1,471	8,655	5,148,611 48	15,579	9,219,454 74
2	10	8	19	1	.....	.....	5	81	29,401 53	116	52,635 65
.....	.....	12	68	3	5	.....	3	183	94,715 62	520	240,733 42
29	22	12	97	14	9	.....	41	371	192,615 91	427	203,876 14
.....	32	15	60	7	8	.....	20	233	143,373 55	1,258	781,430 88
.....	.....	.....	.....	.....	.....	.....	.....	2	3,500 00	2	3,500 00
5	11	20	59	6	4	.....	16	238	137,925 68	2,133	1,279,688 16
66	24	15	191	196	22	.....	120	1,374	796,734 27	17,442	9,998,380 04
38	43	25	168	22	12	.....	68	597	320,758 09	1,192	648,524 64
10	22	25	124	31	10	.....	15	417	238,405 73	1,301	689,321 88
9	.....	13	2	96	7	.....	220	776	518,981 72	10,153	6,175,313 20
20	91	36	213	32	20	.....	25	787	450,225 30	787	450,225 30
90	141	3	28	75	7	.....	230	714	467,980 60	4,069	2,604,464 51
.....
.....	26	9	29	11	.....	.....	18	334	257,884 88	2,879	1,865,569 32
132	159	73	463	150	59	.....	165	1,989	1,063,309 56	3,474	1,856,849 21
.....	.....	1	.....	.....	.....	.....	.....	11	10,028 90	11	10,028 90
94	308	10	149	163	14	.....	279	1,607	961,401 70	9,021	5,595,195 50
.....	.....	2	11	4	1	.....	3	33	14,948 02	33	14,948 02
12	46	6	73	157	17	.....	63	539	266,219 44	539	266,219 44
21	68	27	78	16	12	.....	3	471	251,831 51	577	276,174 00
12	26	12	87	219	18	.....	137	882	544,729 39	11,212	6,981,581 21
.....	.....	1	2	.....	.....	.....	.....	3	1,321 95	3	1,321 95
23	36	19	116	11	5	.....	22	385	220,379 00	385	220,379 00
101	135	44	395	75	27	.....	22	1,318	632,045 21	1,318	632,045 21
.....	.....	2	12	.....	.....	.....	1	25	13,935 00	25	13,935 00
28	10	53	81	.....	.....	.....	138	523	308,085 05	1,471	856,559 70

TABLE VIII.—*Number of Employés and Salaries*

1	2	3	4	5	6	7	8	9	10
	IN								
	General officers,	General office clerks.....	Station agents...	Other station-men.....	Enginemen.....	Firemen.....	Conductors	Other trainmen..	Machinists
NAME OF COMPANY.									
112 Terre Haute & Indianapolis	6	30	27	239	69	73	56	148	36
113 St. Louis, Vandalia & Terre Haute	1	9	34	9	12	12	10	20	13
114 Terre Haute & Peoria	5	26	44	42	30	30	27	51	14
115 Toledo, Peoria & Western			35	77	28	31	19	48	20
116 Toledo, St. Louis & Kansas City...	11	94	118	300	168	174	101	231	190
118 Wabash	2	1	9	4	5	2	2	4	.....
121 Wabash, Chester & Western									
Totals.....	339	2,800	2,080	7,922	3,039	3,149	2,044	4,626	2,339

Year ending June 30, 1892—In Illinois and Whole Line.

11	12	13	14	15	16	17	18	19	20	21	22
ILLINOIS.										WHOLE LINE.	
Carpenters.....	Other shopmen.	Section foremen.	Other trackmen.	Switchmen, flagmen and watchmen.....	Telegraph operators and dispatchers.....	Employees, account floating equipment....	All other employees and laborers.....	Grand total, coals, 2 to 18 inclusive	Total yearly compensation.	Grand total.....	Total yearly compensation.
29	128	33	224	63	62	.....	123	1,346	\$746,650 37	1,346	\$746,650 37
.....	.....	.....	.....	.....	.....	.....	.....	1	100 00	1	100 00
12	11	23	46	9	8	.....	20	255	134,319 18	255	134,319 18
25	51	40	130	8	32	.....	85	640	390,626 24	640	390,626 24
19	92	25	186	16	17	.....	36	650	303,135 70	2,205	1,050,382 74
109	347	103	427	205	100	.....	259	2,937	1,972,791 91	8,811	5,918,375 72
7	.....	6	18	.....	.....	.....	1	61	31,259 70	61	31,259 70
3,566	7,798	1,976	11,817	5,261	1,542	52	6,330	66,680	\$40,072,676 88	211,946	\$128,310,961 56

TABLE IX.—Average Daily Compensation of Employés in Illinois, for the year ending June 30, 1892.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	NAME OF COMPANY.																	
1	Atchison, Topeka & Santa Fe (1)	General officers	General office clerks .	Station agents	Other station men....	Enginemen.....	Firemen	Conductors.....	Other trainmen.....	Machinists	Carpenters	Other shopmen	Section foremen.....	Other trackmen.....	Switchmen, flagmen and watchmen.....	Telegraph operators and dispatchers.....	Employés — Account floating equipment	All other employés and laborers
2	Chicago, Santa Fe & California	\$9 72	\$2 68	\$1 87	\$1 65	\$4 09	\$2 62	\$3 21	\$2 03	\$2 81	\$2 25	\$1 57	\$1 56	\$1 33	\$2 08	\$2 62		\$2 47
3	Baltimore & Ohio.....	11 64	2 30	4 74	1 20	3 63	2 38	3 12	2 79	2 51	1 74	2 20	1 51	1 20	2 16	1 35		1 49
4	Belt Railway of Chicago.....	2 09	1 91	2 16	1 53	2 50	2 83	3 00	2 79	2 51	2 48	1 91	1 58	1 31	1 20	1 58		1 41
5	Centralia & Chester.....			1 21				2 57	1 84	1 99			1 50	1 10				
6	Chicago & Alton.....			1 59	1 73	3 74	2 04	3 25	1 60	1 90	2 05	2 02	1 83	1 46	1 72	1 63		2 81
7	Chicago & Calumet Terminal	12 56	2 96	1 56	1 31	3 34	2 10	3 46	1 87	3 44	3 15	2 92	1 80	1 46	1 20	1 80		4 43
8	Chicago & Eastern Illinois	1 09	2 31	1 81	1 07	3 60	2 21	3 46	2 32	2 36	2 12	2 56	1 85	1 25	2 23	2 02		1 85
9	Chicago & Western Indiana.....	10 50	2 42	3 12	1 69			3 46	2 32	2 36	2 12	2 56	1 85	1 25	2 23	2 02		1 95
10	Chicago & Grand Trunk.....	14 34	2 42	3 12	1 69			3 46	2 32	2 36	2 12	2 56	1 85	1 25	2 23	2 02		1 95
11	Chicago & Indiana State Line	9 21	1 60	1 73	1 69	4 35	2 33	2 77	1 97	1 94	1 32	1 26	1 98	1 12	1 14	1 68		1 72
12	Chicago & Northwestern												2 30	1 70	1 79			2 18
13	Chicago & Ohio River.....	23 17	2 43	3 05	1 66	3 50	2 15	3 31	2 02	2 14	1 89	1 73	1 81	1 34	1 90	2 03		2 04
14	Chicago, Burlington & Northern	38 37	1 43	1 05	3 00	3 00	1 80	3 12	2 02	2 68	1 93	1 61	1 51	1 95		2 01		78
15	Chicago, Burlington & Quincy		3 56	1 58	1 30	4 42	2 05	2 83	1 90	3 05	2 17	1 66	1 39	1 07	1 74	1 67		1 49
16	Chicago & Iowa.....	6 39	2 87	1 02	1 38	3 66	2 11	2 97	1 73	2 12	2 17	1 95	1 75	1 10	1 52	1 66		1 72
17	Chicago, Milwaukee & St. Paul	2 87	2 28	2 15	1 82	3 65	2 26	3 19	1 85	2 71	2 30	1 82	1 76	1 28	2 02	2 08		1 60
18	Chicago, Rock Island & Pacific	23 96	2 91	2 10	1 79	3 89	2 34	3 45	1 85	2 71	2 30	1 82	1 76	1 28	2 02	2 08		1 60
19	Chicago, St. Paul & Kansas City	16 08	2 52	1 68	1 71	3 71	2 14	3 05	1 92	2 77	2 12	1 87	1 73	1 13	2 04	2 14		1 67
20	Cleveland, Cincinnati, Chicago & St. L.....	10 14	2 52	2 02	1 07	4 38	2 60	3 45	1 92	2 77	2 12	1 87	1 73	1 13	2 04	2 14		1 67
21	Kankakee & Seneca.....	15 47	2 52	2 02	1 07	4 38	2 60	3 45	1 92	2 77	2 12	1 87	1 73	1 13	2 04	2 14		1 67
22	Kankakee & Seneca.....	2 87	1 45	1 15	1 15	4 12	2 45	2 90	1 62	2 05	1 88	1 92	1 72	1 19	1 94	1 78		1 89
23	Peoria & Eastern.....	10 12	2 34	1 40	1 50	4 28	2 70	3 84	1 62	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 61
24	East St. Louis & Carondelet.....	5 10	1 91		1 92	3 25	2 40	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
25	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
26	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
27	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
28	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
29	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
30	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
31	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
32	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
33	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
34	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
35	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
36	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
37	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
38	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
39	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
40	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
41	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
42	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
43	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
44	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
45	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
46	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
47	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
48	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
49	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
50	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
51	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
52	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
53	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
54	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
55	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
56	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
57	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
58	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
59	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
60	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
61	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51
62	East St. Louis Connecting.....	3 63	1 89		1 92	3 19	2 00	3 24	2 50	2 00	1 81	1 93	1 72	1 20	1 55	1 76		1 51

63	Indiana, Illinois & Iowa	6 33	2 03	1 39	1 40	3 33	1 84	2 68	1 88	2 90	2 20	1 65	1 48	1 33	1 88	1 80	1 42	63
64	Iowa, Central	5 53	1 45	1 39	1 40	3 33	2 24	2 95	1 66	2 90	2 20	1 88	1 57	1 19	2 13	1 94	1 80	64
65	St. Louis & Chicago	1 98	2 34	1 83	1 48	4 01	2 19	3 12	1 98	3 14	2 05	1 87	1 55	1 26	1 28	1 72	1 27	72
72	Lake Erie & Western	1 98	2 34	1 83	1 48	4 01	2 19	3 12	1 98	3 14	2 05	1 87	1 55	1 26	1 28	1 72	1 27	72
73	Lake Erie & Michigan Southern	1 98	2 34	1 83	1 48	4 01	2 19	3 12	1 98	3 14	2 05	1 87	1 55	1 26	1 28	1 72	1 27	73
74	Lake Shore & Nashville	6 02	1 65	1 78	1 63	4 28	2 25	3 30	1 73	1 83	2 03	1 60	1 56	1 25	2 72	2 44	1 63	74
75	Louisville & Nashville	16 40	3 26	1 29	1 04	4 55	2 36	3 06	2 03	3 26	2 09	1 37	1 37	1 12	2 08	1 30	1 25	75
77	Louisville, Evansville & St. L., Con.	9 33	2 32	1 82	1 78	3 13	1 72	3 18	1 97	2 37	2 83	1 89	1 89	1 92	2 61	1 61	1 61	77
78	Michigan Central	9 33	2 32	1 82	1 78	3 13	1 72	3 18	1 97	2 37	2 83	1 89	1 78	1 21	2 60	2 39	1 08	78
80	Mobile & Ohio	4 31	1 48	1 48	1 48	3 60	1 83	3 50	2 40	2 24	2 15	1 90	1 81	1 23	2 83	1 95	1 82	80
83	New York, Chicago & St. Louis	8 50	1 81	1 74	1 68	3 52	2 14	3 08	1 90	2 24	2 15	1 90	1 81	1 23	2 83	1 95	1 82	83
85	Northern Pacific (I)	6 70	3 30	1 66	1 26	3 49	1 93	3 46	2 12	2 42	2 04	1 37	1 67	1 08	1 52	1 61	2 90	85
86	Wisconsin Central Lines	4 79	1 19	1 19	1 19	2 30	1 63	99	...	...	...	...	1 00	...	...	...	2 25	86
88	Ohio & Mississippi	6 57	2 51	1 97	1 96	3 47	2 05	2 85	2 39	3 01	1 92	1 69	2 02	1 25	1 35	1 96	2 25	88
89	Pawnee	6 20	1 70	1 39	1 03	2 92	1 54	2 62	1 34	2 34	2 35	1 80	1 70	1 25	1 26	1 64	1 52	89
90	Pennsylvania Co. (I)	7 83	2 57	2 93	1 79	3 23	1 93	2 99	2 47	2 42	2 18	1 78	1 82	1 40	1 52	1 71	1 94	90
92	Pittsburgh, Ft. Wayne & Chicago	7 50	2 04	1 75	1 32	3 39	1 87	2 74	1 65	2 54	2 04	1 62	1 55	1 17	1 70	1 99	1 78	92
93	South Chicago & Southern	10 34	2 91	1 28	1 56	3 42	1 76	3 01	1 86	2 23	1 8	1 41	1 48	1 14	2 13	1 57	1 87	93
94	Peoria & Pekin Union	5 00	1 65	1 65	1 65	3 00	1 70	2 70	1 90	2 35	2 20	1 90	1 70	1 25	1 90	1 86	1 21	94
95	Peoria, Decatur & Evansville	11 36	2 10	1 78	1 53	3 42	2 14	2 61	2 42	2 35	2 27	1 98	1 70	1 25	1 90	1 86	1 21	95
96	Pittsburg, Cincinnati, Chi. & St. L.	7 83	2 57	2 93	1 79	3 23	1 93	2 99	2 47	2 42	2 18	1 78	1 82	1 40	1 52	1 71	1 94	96
97	Englewood Connecting	7 50	2 04	1 75	1 32	3 39	1 87	2 74	1 65	2 54	2 04	1 62	1 55	1 17	1 70	1 99	1 78	97
99	Rock Island & Peoria	10 34	2 91	1 28	1 56	3 42	1 76	3 01	1 86	2 23	1 8	1 41	1 48	1 14	2 13	1 57	1 87	99
101	St. Louis, Alton & Terre Haute	5 00	1 65	1 65	1 65	3 00	1 70	2 70	1 90	2 35	2 20	1 90	1 70	1 25	1 90	1 86	1 21	101
109	St. Louis & Peoria	11 36	2 10	1 78	1 53	3 42	2 14	2 61	2 42	2 35	2 27	1 98	1 70	1 25	1 90	1 86	1 21	109
110	Terminal Railroad Assn. of St. Louis	5 95	2 00	1 48	1 29	3 59	1 86	2 84	1 47	1 59	1 62	1 31	1 53	1 05	1 35	1 59	1 20	110
112	Terre Haute & Indianapolis	10 19	2 12	1 07	1 65	3 84	2 23	3 34	1 94	1 80	1 97	1 71	1 36	1 14	1 38	1 86	1 70	112
113	St. Louis, Vandalia & Terre Haute	14 30	2 66	1 93	1 79	4 06	2 30	3 55	2 20	1 94	2 22	1 69	1 81	1 17	2 25	2 02	2 42	113
114	Terre Haute & Peoria	4 31	2 68	1 32	1 06	2 55	2 00	2 77	1 66	...	1 66	...	1 53	1 10	...	...	1 73	114
115	Toledo, Peoria & Western	10 19	2 12	1 07	1 65	3 84	2 23	3 34	1 94	1 80	1 97	1 71	1 36	1 14	1 38	1 86	1 70	115
116	Toledo, St. Louis & Kansas City	14 30	2 66	1 93	1 79	4 06	2 30	3 55	2 20	1 94	2 22	1 69	1 81	1 17	2 25	2 02	2 42	116
118	Wabash	4 31	2 68	1 32	1 06	2 55	2 00	2 77	1 66	...	1 66	...	1 53	1 10	...	...	1 73	118
119	Wabash, Chester & Western	4 31	2 68	1 32	1 06	2 55	2 00	2 77	1 66	...	1 66	...	1 53	1 10	...	...	1 73	119
121	Wabash, Chester & Western	4 31	2 68	1 32	1 06	2 55	2 00	2 77	1 66	...	1 66	...	1 53	1 10	...	...	1 73	121

TABLE X.—Description of Equipment, Whole Line, for year ending June 30, 1892.

NAME OF COMPANY.	LOCOMOTIVES.										CARS IN PASSENGER SERVICE.									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
	Passenger.....	Freight.....	Switching.....	Total. Cols. 2+3+4.....	Equipped with train brake..	Fitted with automatic coupler.....	Fitted with automatic coupler.....	First-class passenger cars..	Second-class passenger cars.....	Combination passenger cars.....	Emigrant cars..	Dining cars....	Parlor cars....	Sleeping cars..	Baggage, express and postal cars...	Others.....	Total. Cols. 8+9+10+11+12+13+14+15+16.	Equipped with train brake..	Fitted with automatic coupler.....	
1 Atchison, Topeka & Santa Fe (1).....	14	.....	.....	3	17	17	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	4	4	4	1
2 Chicago, Santa Fe & California.....	2	.....	.....	.....	2	170	.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
3 Central & Chester.....	51	131	.....	47	232	170	.....	98	.....	.....	.....	.....	.....	.....	.....	.....	144	144	144	9
4 Chicago & Alton.....	33	71	20	124	59	59	.....	68	7	10	.....	.....	.....	.....	.....	.....	108	108	108	13
5 Chicago & Eastern Illinois.....	.....	.....	.....	37	40	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
6 Chicago & Western Indiana.....	.....	.....	.....	37	40	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
7 Chicago & Erie.....	15	62	20	97	75	75	.....	37	5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
8 Chicago & Grand Trunk.....	25	86	20	131	125	125	.....	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
9 Chicago & Northwestern.....	186	528	155	869	805	805	.....	378	28	49	.....	.....	.....	.....	.....	.....	61	61	61	21
10 Chicago & North Western.....	7	.....	.....	19	19	19	.....	41	.....	.....	.....	.....	.....	.....	.....	.....	51	51	51	22
11 Chicago & Ohio River.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
12 Chicago, Burlington & Northern.....	1	38	6	56	56	56	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
13 Chicago, Burlington & Quincy.....	82	301	103	486	486	486	.....	238	.....	.....	.....	.....	.....	.....	.....	.....	373	373	373	25
14 Chicago & Iowa.....	10	17	3	44	14	5	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	11	11	11	26
15 St. Louis, Rock Island & Chicago.....	37	17	3	30	30	30	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	20	20	20	27
16 Chicago, Milwaukee & St. Paul.....	244	461	93	798	513	513	.....	322	35	.....	.....	.....	.....	.....	.....	.....	683	683	683	34
17 Chicago, Rock Island & Pacific.....	161	245	91	547	374	374	.....	125	47	40	.....	.....	.....	.....	.....	.....	408	408	408	35
18 Chicago, St. Paul & Kansas City.....	26	51	5	82	82	82	.....	10	18	8	.....	.....	.....	.....	.....	.....	54	54	54	37
19 Cleveland, Cincinnati, Chi. & St. L.....	9	211	70	376	272	272	.....	147	82	20	.....	.....	.....	.....	.....	.....	364	364	364	39
20 Peoria & Eastern.....	18	37	8	63	18	18	.....	16	17	.....	.....	.....	.....	.....	.....	.....	48	48	48	41
21 East St. Louis & Carondelet.....	.....	.....	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
22 East St. Louis Connecting.....	.....	.....	.....	10	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44
23 Elgin, Joliet & Eastern.....	1	21	9	31	31	31	.....	1	1	1	.....	.....	.....	.....	.....	.....	3	3	3	45
24 Fulton County Narrow Gauge.....	1	4	.....	5	5	5	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	6	6	6	46
25 Grand Tower & Carbondale.....	3	3	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
26 Illinois Central.....	138	339	109	577	369	369	.....	277	55	6	.....	.....	.....	.....	.....	.....	450	450	450	49
27 Indiana & Illinois Southern.....	.....	.....	.....	4	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
28 Indianapolis, Decatur & Western.....	1	3	.....	4	4	4	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	2	2	2	51
29 Indianapolis, Decatur & Western.....	5	11	2	18	18	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18	18	18	62
30 Iowa Central.....	10	16	4	20	18	18	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	2	2	2	63
31 Iowa Central.....	10	16	4	20	18	18	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	2	2	2	64
32 Lake Erie & Western.....	30	58	21	109	62	62	.....	21	17	6	.....	.....	.....	.....	.....	.....	72	72	72	73

74 Lake Shore & Michigan Southern...	121	309	158	588	197	6	177	42	18	19	9	...	...	105	7	377	377	377	74
75 Louisville & Nashville	5	15	7	27	6	...	9	...	...	...	...	...	...	3	...	13	13	13	75
77 Louisville, Evan. & St. L., (consol.)...	13	27	7	43	...	...	13	10	5	...	...	2	...	12	1	42	43	43	77
78 Michigan Central	255	106	60	421	283	...	141	51	24	11	...	...	...	89	...	316	316	316	78
80 Mobile & Ohio	4	7	3	14	14	...	4	3	1	...	...	...	...	4	1	13	13	13	80
83 New York, Chicago & St. Louis	26	98	14	138	107	...	23	10	...	...	...	...	...	14	2	49	49	49	83
85 Northern Pacific	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	85
86 Wisconsin Central Lines	36	94	20	150	148	...	42	22	7	...	4	5	13	34	2	129	129	129	86
88 Ohio & Mississippi	31	64	20	115	115	31	54	...	13	...	...	...	...	33	3	103	103	103	88
89 Pawnee	...	1	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...	89
90 Pennsylvania Co. (n)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	90
92 Pittsburgh, Ft. Wayne & Chicago	56	188	56	300	207	56	94	66	12	...	...	...	...	72	...	244	244	244	92
94 Peoria & Pekin Union	...	...	13	14	8	...	1	...	...	...	...	...	...	...	...	2	...	...	94
95 Peoria, Decatur & Evansville	9	21	2	32	9	...	6	6	3	...	...	...	...	3	1	19	19	19	95
96 Pittsburg, Cincinnati, Chi. & St. L.	94	274	53	421	411	99	108	...	15	...	...	3	2	104	2	294	294	294	96
98 Quincy, Omaha & Kansas City	3	5	1	9	9	...	...	...	...	...	...	...	...	...	...	5	5	5	98
99 Rock Island and Peoria	3	13	3	19	14	3	8	3	1	...	...	...	...	...	...	12	12	12	99
100 St. Louis, Alton & Springfield	2	3	5	5	5	...	5	8	3	...	...	...	...	3	...	11	11	11	100
101 St. Louis, Alton & Terre Haute	6	25	8	39	18	...	13	7	5	...	...	...	...	6	1	32	32	32	101
108 St. Louis & Eastern	...	1	...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	108
109 St. Louis & Peoria	...	2	...	1	2	...	...	...	...	...	...	...	...	...	...	1	1	1	109
110 Terminal R. R. Ass'n of St. Louis	...	...	27	27	27	...	...	3	...	3	...	...	...	...	...	6	6	6	110
112 Terre Haute & Indianapolis	24	17	8	49	32	...	7	9	2	...	2	...	...	12	...	32	32	32	112
114 Terre Haute & Peoria	6	7	...	13	8	...	6	...	...	...	...	...	...	2	1	12	12	12	114
115 Toledo, Peoria & Western	10	29	3	42	21	...	12	...	5	...	...	...	...	8	...	25	25	25	115
116 Toledo, St. Louis & Kansas City	16	34	12	62	37	...	9	4	2	...	2	...	...	7	1	25	25	25	116
118 Wabash	105	224	71	400	310	...	138	...	...	...	5	40	...	103	7	293	293	293	118
121 Wabash, Chester & Western	1	2	...	3	2	...	1	1	1	...	...	...	...	...	...	3	3	3	121
Totals	2,004	4,389	1,375	7,768	5,849	416	2,803	551	347	42	84	127	117	1,594	115	5,780	5,722	5,661	

(1) Inserted to show relation of following subsidiary lines.

TABLE X.—Description of Equipment, Whole Line, for year ending June 30, 1892—Continued.

NAME OF COMPANY.	CARS IN FREIGHT SERVICE.										CARS IN COMPANY'S SERVICE.						
	20	21	22	23	24	25	26	27	28	29	Gravel cars....	Derreck cars..	Caboose cars..	Others.....	Total. Cols. 30 +31+32+33....	Equipped with train brake...	Fitted with au- tomatic c'pler.
	Box cars	Flat cars.....	Stock cars.....	Coal cars	Tank cars	Refrigerator cars.....	Others.....	Total. Cols. 20 +21+22+23+24 +25+26.....	Equipped with train brake...	Fitted with automatic coupler							
1 Atchison, Topeka & Santa Fe (1)	842	165		947			18	1,972				9	46	188	237		
2 Chicago, Santa Fe & California.																	
3 Baltimore & Ohio (1)	364							364									
6 Baltimore & Ohio & Chicago.																	
7 Belt Railway of Chicago.																	
8 Centralia & Chester	2												7				
9 Chicago & Alton	3,177	561	1,848	1,407	130			7,123	439	361	92	3	112	13	220		
12 Chicago & Calumet Terminal.							2	31									
13 Chicago & Eastern Illinois.	2,012	315	192	6,580	64			9,193	1,200	1,300	59	3	56	11	124	54	50
14 Chicago & Western Indiana.								54			51	1	15	23	93		
16 Chicago & Erie	122	409	9	109				649		112	2	2	54	4	60	1	26
17 Chicago & Grand Trunk.	173	115	15				63	396		167							
20 Chicago & Northwestern.	16,689	2,576	1,861	1,950	230	4,151		27,407	7,311	6,750	35	2	486	8	10		
21 Chicago & Ohio River.	6							6									
23 Chicago & Burlington & Northern.																	
25 Chicago, Burlington & Quincy.	2,450	100	300	500				3,350	59	58		1	25	164	190	2	
26 Chicago, Burlington & Quincy.	13,772	985	2,435	2,615	355			20,162	4,892	4,356	4	4	244	11	259		
27 Chicago & Iowa	152							200	15	15							
32 St. Louis, Rock Island & Chicago.	386	130	94	261				871				1	12				
34 Chicago, Milwaukee & St. Paul.	17,881	3,786	2,496	1,325	550		290	25,003	4,460	5,788	382	10	432	51	775	8	150
35 Chicago, Rock Island & Pacific.	9,824		2,052	2,416	132			11,417	4,650	8,342		5	290	142	437	121	35
37 Chicago, St. Paul & Kansas City.	1,521	210	349					2,591				3	80	31	117	3	
39 Cleveland, Cin., Ohn. & St. Louis.	8,481	2,250	724	1,921	397			13,792	1,630	4,915	410	14	195	105	724		89
41 Peoria & Eastern	351	264	93	251				1,575			30	2	32				
43 East St. Louis & Carondelet.											25						
44 East St. Louis Connecting.	30							30									
45 East St. Louis & Eastern.	100							1,000				1	22		23		
46 Fulton County Narrow Gauge.	41	18	25	75				167									
49 Grand Tower & Carbondale.							214	295									
50 Illinois Central	8,670	1,025	1,098	4,210	520			15,523	1,943		109	9	288		488		49
61 Indiana & Illinois Southern.								101									
62 Indianapolis, Decatur & Western.	501	71	89	110				771				1	7	1	4		62

63	Indiana, Illinois & Iowa.....	3	32	147	4	186	2	148	.....	2	16	16	.....	16	.....	63
64	Iowa Central.....	717	47	698	.....	1,462	.....	.....	.....	.....	34	16	.....	52	3	12
73	Lake Erie & Western.....	3,568	194	276	.....	4,786	.....	.....	.....	3	43	11	.....	57	.....	64
74	Lake Erie & Michigan Southern.....	7,095	2,527	1,381	4,437	.....	50	2,932	2,23	12	272	25	532	5	.....	73
75	Louisville & Nashville.....	112	70	20	355	.....	.....	.....	.....	.....	10	6	.....	17	1	71
77	Louisv., E. ans. & St. Louis Con.....	971	242	1,059	.....	2,318	.....	.....	41	1	15	116	173	.....	.....	75
78	Michigan Central.....	4,650	8,246	1,357	453	32	122	96	1,387	7	248	111	366	5	3	77
80	Mobile & Ohio.....	205	33	129	.....	8	.....	6	26	11	17	13	41	.....	.....	78
83	New York, Chicago & St. Louis.....	3,959	1,044	629	227	.....	150	5,100	156	4	76	1	81	.....	.....	80
85	Northern Pacific (1).....	3,499	774	300	246	3	23	1,786	.....	1	72	7	.....	.....	.....	83
86	Wisconsin Central Lines.....	1,726	222	81	185	.....	.....	2,025	.....	2	67	35	104	.....	.....	85
88	Ohio & Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	86
89	Pawnee.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
90	Pennsylvania Co (1).....	4,628	450	2,432	.....	9,755	1,898	1,934	.....	6	16	6	174	5	.....	90
92	Pittsburgh, Ft. Wayne & Chicago.....	.....	.....	.....	.....	2,97	.....	.....	.....	1	.....	.....	.....	.....	.....	92
94	Peoria & Pekin Union.....	4	3	200	.....	1,810	.....	.....	.....	1	12	72	85	.....	.....	94
95	Peoria, Decatur & Evansville.....	1,261	126	88	335	.....	.....	.....	.....	10	269	26	305	.....	.....	95
96	Pittsburgh, Cin. Chi. & St. Louis.....	4,948	783	1,323	300	200	.....	1,688	1,924	.....	.....	.....	.....	.....	.....	96
98	Quincy, Omaha & Kansas City.....	42	20	11	20	.....	.....	.....	.....	1	8	5	9	.....	.....	98
99	Rock Island & Peoria.....	224	24	30	200	.....	.....	170	100	.....	1	2	11	.....	.....	99
100	St. Louis, Alton & Springfield.....	15	40	40	.....	478	.....	95	.....	.....	2	2	.....	.....	.....	100
101	St. Louis, Alton & Terre Haute.....	246	147	20	1,431	.....	.....	.....	.....	1	21	6	28	.....	.....	101
108	St. Louis & East-ern.....	.....	.....	.....	.....	1,894	.....	.....	.....	.....	.....	.....	.....	.....	.....	108
109	St. Louis & Peoria.....	.....	.....	200	.....	200	.....	.....	.....	.....	1	.....	.....	.....	.....	109
110	Terminal Railroad Ass. of St. Louis.....	.....	25	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	110
112	Terre Haute & Indianapolis.....	804	132	285	510	.....	.....	.....	.....	1	4	15	144	.....	.....	112
114	Terre Haute & Peoria.....	95	11	24	64	.....	.....	.....	101	1	27	19	19	.....	.....	114
115	Toledo, Peoria & Western.....	444	7	117	269	.....	.....	.....	.....	1	9	10	19	.....	.....	115
116	Toledo, St. Louis & Kansas City.....	476	395	93	297	.....	.....	.....	.....	1	16	12	29	1	.....	116
118	Wabash.....	5,690	1,282	3,880	.....	48	100	10,961	510	9	223	201	733	10	.....	118
121	Wabash, Chester & Western.....	20	2	31	.....	55	.....	.....	.....	1	1	.....	.....	.....	.....	121
	Totals.....	132,566	24,278	23,395	43,508	35	2,981	6,768	.....	106	4,091	1,074	7,668	106	387	

(1) Inserted to show relation of following subsidiary lines.

	300				310	7	3
49 Grand Tower & Carbondale.....					17,073	2,762	450
50 Illinois Central.....	16,436				111	6	2
61 Indiana & Illinois Southern.....	107				816	36	18
62 Indianapolis, Decatur & Western.....	798				224	18	63
63 Indiana, Illinois & Iowa.....	204				1,605	95	191
64 Iowa Central.....	1,545			404	5,446	72	64
73 Lake Erie & Western.....	20,976				21,564	2,346	3,970
74 Lake Shore & Michigan Southern.....	655				614	20	74
75 Louisville & Nashville.....	584				2,581	86	75
76 Louisville, Evansville & St. Louis, Consolidated.....	13,980				14,401	1,750	2,412
78 Michigan Central.....	706				89	33	43
80 Mobile & Ohio.....	179			101	440	35	80
83 New York, Chicago & St. Louis.....	6,877				7,015	306	1,380
85 Northern Pacific (1).....	6,810				6,930	2,036	2,154
86 Wisconsin Central Lines.....	2,421				2,536	218	134
88 Ohio & Mississippi.....	2				3		88
89 Pawnee.....							89
90 Pennsylvania Co. (2).....							90
92 Pittsburgh, Ft. Wayne & Chicago.....	10,173		27		10,473	2,444	2,234
94 Peoria & Pekin Union.....	210			26	224	8	94
95 Peoria, Decatur & Evansville.....	1,914				1,946	28	19
96 Pittsburgh, Cincinnati, Chicago & St. Louis.....	8,153		2,925	500	8,574	2,393	2,317
98 Quincy, Omaha & Kansas City.....	140				149	14	4
99 Rock Island & Peoria.....	501				520	201	115
100 St. Louis, Alton & Springfield.....	108				113	16	106
101 St. Louis, Alton & Terre Haute.....	1,951				1,993	50	82
108 St. Louis & Eastern.....	201				202	50	101
109 St. Louis & Peoria.....	36				203	3	108
110 Terminal Railroad Association of St. Louis.....	1,907				1,956	83	109
112 Terre Haute & Indianapolis.....	225				238	64	112
114 Terre Haute & Peoria.....	891				933	108	114
115 Toledo, Peoria & Western.....	2,727		339		2,789	62	26
116 Toledo, St. Louis & Kansas City.....	13,471				13,871	1,123	535
118 Wabash.....	60				63	5	116
121 Wabash, Chester & West-rn.....							357
121 Wabash, Chester & West-rn.....							118
Total.....	263,348	14,929	2,054	1,415	271,116	47,078	52,629

(1) Inserted to show relation of subsidiary lines.

28	Galesburg & Rio	12.22	3,264	3,000	3	2.57	11.95	19.61	16.15	18.55	.08	1.94
29	Illinois Valley & Northern	51.81	2,893	3,000	15	1.83				1.83		
30	Liverpool Coal	1.55		2,640						41.63		
31	Quincy, Alton & St. Louis	34.77	11.37	2,640		51	1.02	158.44	2.41	70.11		22.36
32	St. Louis, Rock Island & Chicago	10.10	93.08	125,762	65	140.21		18.10				
33	Chicago Central	18.10		3,000	65	34.60						
34	Chicago, Milwaukee & St. Paul	20.51		2,640	118							
35	Chicago, Rock Island & Pacific	20.51	1,671.00	2,640	37	253.95		2.32	10.50	17.00	34.31	
36	Peoria & Bureau Valley	181.48	6,390.00	2,640			11.00	146.48	16.00		3.00	
37	Chicago, St. Paul & Kansas City	16.73	5.65	2,640	34							
38	Chicago Union Transfer	15.36		3,000								
39	Cleveland, Cincinnati, Chicago & St. Louis	479.75	957.00	3,000	103	102.80						
40	Kankakee & Seneca	11.48	5.081	3,000	12							
41	Peoria & Eastern	122.50		3,000	26							
42	DePue, Ladd & Eastern	3.50	3,055	2,640	2	12.01						
43	East St. Louis & Carondelet	8.79	209.11	2,640								
44	East St. Louis Connecting	3.36		2,640								
45	Elgin, Joliet & Eastern	159.66	2.50	3,000	34							
46	Fulton County Narrow Gauge	61.00		2,700	6	6.00						
47	Grand Tower & Cape Girardeau	28.80	18,126	2,640								
48	Grand Tower & Carbondale	26.20	6.00	2,640	8	18.70						
49	Illinois Central	705.50	7,132.07	2,950	185	87.71						
50	Blue Island	3.98	481.881	3,000	7	3.66						
51	Chicago, Havana & Western	51.84		3,000	31	121.60						
52	Chicago, Madison & Northern	73.78		3,000	31							
53	Chicago & Springfield	139.59		3,000	32	20.83						
54	Duquoin & Dubuque Bridge	111.47		3,000	32	24.51						
55	Kankakee & Southwestern	17		3,000								
56	Mound City	89.76		3,000	37	14.31						
57	Rantoul	51.20		3,000	22	61.80						
58	South Chicago	14.95		3,000	9	9.52						
59	St. Charles Air Line	.76										
60	Indiana & Illinois Southern	56.00										
61	Indianapolis, Decatur & Western	75.76	20.56	2,640	8	45.00						
62	Indiana, Illinois & Iowa	68.95	224.65	15,000	17	5.00						
63	Iowa Central	88.66		2,800	21	2.67						
64	Kettusburg Bridge	1.10										
65	Peoria Terminal	1.00		2,800	13							
66	St. Louis & Chicago	50.56		2,700	26	7.59						
67	Lake Erie & Western	118.00		2,640	12	.51						
68	Lake Shore & Michigan Southern	14.02	265.84									
69	Louisville & Nashville	136.11	253.28	2,816	66	107.93						
70	South-east & St. Louis	150.27	36,085	2,900	35	58.13						
71	Louisville, Evansville & St. Louis, Consolidated	6.07	3,994	2,700	6							
72	Michigan Central	29.00	11,890	2,700								
73	Joliet & Northern Indiana	169.60	55,526	2,992	29	115.10						
74	Mobile & Ohio	9.96		3,000	3	2.75						
75	St. Louis & Cairo											
76	New York, Chicago & St. Louis											
77	Chicago & State Line											

(1) Inserted to show relation of following subsidiary lines.

113	St. Louis, Vandalia & Terre Haute.....	.....	138.34	1,601.15	72,256	2,900	32	57.49	33.20	119.64	.50	.....	.....	113
114	Terre Haute & Peoria.....	.....	144.74	28.00	59,500	2,640	39	.....	.....	.....	.....	144.74	.....	114
115	Toledo, Peoria & Western.....	10.00	220.10	939.00	61,800	2,800	52	69.35	.....	2.00	6.00	222.10	.....	115
116	Toledo, St. Louis & Kansas City.....	.....	179.49	100.00	16,966	2,640	39	39.50	.....	108.23	.....	60.53	10.73	116
117	Union Stock Yards & Transit.....	.....	16.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	117
118	Wabash.....	14.90	644.70	3,133.33	240,257	3,000	185	142.80	41.70	312.70	109.20	196.00	.....	118
119	Champaign & Sidney.....	.....	11.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
120	Louisiana & Pike County.....	.....	6.10	.....	.....	2,700	16	31.75	.....	.....	.....	42.26	.....	120
121	Wabash, Chester & Western.....	4.78	37.48	.....	.....	.....	16	.....	.....	.....	.....	.....	.....	121
	Totals.....	700.61	9,138.20	46,176.13	3,415,018	.....	2,454	1,715.55	1,204.85	4,220.33	648.53	3,390.95	136.92	111.75

(1) Inserted to show relation of subsidiary lines.

34	Chicago, Milwaukee & St. Paul.....	13	26	1	8, 926.00	547	25, 456.00	1	2	469
35	Chicago, Rock Island & Pacific.....	95	3	2	8, 086.00	81	3, 990.00	4	1	38
36	Chicago, St. Paul & Kansas City.....	7	1	1	1, 715.00	186	19, 251.00	3	7	124
37	Cleveland, Cincinnati, Chicago & St. L.....	16	12	12	6, 204.20	421	44, 590.00	11	3	612
38	Kankakee & Seneca.....	1	5	2	2, 352.00	26	2, 588.00	7	2	42
39	Prairie & Eastern.....	3	1	1	500.00	125	18, 500.00	1	1	224
40	East St. Louis & Carondelet.....	43	3	1	750.00	3	579.00	1	1	12
41	East St. Louis Connecting.....	44	9	1	2, 722.00	156	26, 618.00	2	2	145
42	Elgin, Joliet & Eastern.....	23	3	3	350.00	88	10, 135.00	2	2	45
43	Fulton County Narrow Gauge.....	46	2	2	380.00	21	1, 875.00	1	1	62
44	Grand Tower & Cape Girardeau.....	49	1	2	500.00	14	3, 334.00	1	1	21
45	Grand Tower & Carbondale.....	50	5	1	12, 580.00	835	17, 885.00	1	2	13
46	Illinois Central.....	51	1	1	457.00	1	12, 612.00	1	24	847
47	Blue Island.....	52	2	1	457.00	208	10, 689.00	1	51	50
48	Chicago, Havana & Western.....	53	3	3	4, 318.00	201	15, 251.00	3	2	161
49	Chicago, Madison & Northern.....	28	2	2	537.00	120	6, 612.00	1	39	32
50	Chicago & Springfield.....	1	1	1	890.00	168	16, 097.00	3	1	154
51	Duane & Dubuque Bridge.....	1	2	2	890.00	226	12, 855.00	1	55	187
52	Kankakee & Southwestern.....	56	1	1	359.00	77	3, 679.00	2	2	54
53	Kankakee & Western.....	57	1	1	60.00	3	60.00	1	1	118
54	Rock Island.....	58	1	1	996.00	105	6, 307.00	1	1	56
55	South Chicago.....	59	1	1	2, 020.00	197	15, 396.00	6	25	101
56	Indiana & Illinois Southern.....	61	8	8	416.00	118	8, 629.00	1	76	61
57	Indianapolis, Decatur & Western.....	62	1	1	1, 248.00	35	7, 298.00	3	82	62
58	Indiana, Illinois & Iowa.....	63	2	2	409.00	138	15, 889.00	2	71	63
59	Iowa Central.....	64	1	1	165.00	1	145.00	2	102	64
60	St. Louis & Chicago.....	72	1	1	614.00	359	14, 716.00	2	155	73
61	Lake Erie & Western.....	73	1	1	1, 295.00	218	19, 523.00	6	61	74
62	Lake Erie & Michigan Southern.....	74	1	1	396.00	1	251.00	1	74	75
63	Louisville & Nashville.....	75	1	2	551.00	15	551.00	1	77	76
64	South-east, Evansville & St. Louis, Con.....	76	1	8	982.00	270	19, 966.00	1	140	77
65	Michigan Central.....	77	1	1	982.00	270	19, 966.00	1	7	78
66	Joliet & Northern Indiana.....	78	1	15	140.00	7	175.00	1	41	79
67	Mobile & Ohio.....	79	1	1	510.50	47	2, 753.00	1	80	80
68	St. Louis & Cairo.....	80	1	1	1, 522.00	232	87, 557.00	1	81	81
69	St. Louis & Chicago.....	81	8	1	56.00	1	160.00	1	83	83
70	New York, Chicago & St. Louis.....	82	1	1	433.50	2	250.00	7	84	84
71	Chicago & Stage Line.....	83	1	1	229.42	8	256.00	1	85	85
72	Northern Pacific.....	84	1	1	2, 190.00	27	2, 378.00	2	86	86
73	Wisconsin Central Lines.....	85	1	1	380.00	3	392.04	7	87	87
74	Chicago & Wisconsin.....	86	1	1	380.00	3	392.04	7	88	88
75	Ohio & Mississippi.....	87	1	1	3	5	5	5	300	89
76	Pawnee.....	88	1	1	3	5	5	5	300	89
77	Pennsylvania Co. (!).....	89	1	1	56.00	1	160.00	1	90	90
78	Calumet River.....	90	1	1	433.50	2	250.00	7	91	91
79	Pittsburgh, Ft. Wayne & Chicago.....	4	2	2	229.42	8	256.00	1	61	92
80	South Chicago & Southern.....	2	2	2	2, 190.00	27	2, 378.00	2	32	93
81	Peoria & Pekin Union.....	1	1	1	2, 190.00	27	2, 378.00	2	16	94
82	Peoria, Decatur & Evansville.....	2	1	2	828.00	237	23, 628.00	2	94	94
83	Pittsburgh, Cincinnati, Chicago & St. L.....	1	1	1	380.00	3	392.04	7	242	95
84	Englewood Connecting.....	1	1	1	380.00	3	392.04	7	84	96
85	Englewood Connecting.....	1	1	1	380.00	3	392.04	7	18	97
86	Englewood Connecting.....	1	1	1	380.00	3	392.04	7	18	97

Table XI.—*Rails, Ties, Stations, Ballast, Bridges, Trestles, Overhead Crossings, etc., in Illinois—Concluded.*

NAME OF COMPANY.	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	BRIDGES.				Aggregate length in feet.....	TRESTLES.			OVERHEAD HIGHWAY CROSSINGS.			OVERHEAD RAILWAY CROSSINGS.		N. of grade highway crossings.....
	No. of stone.....	No. of iron	No. of wooden	No. of combination.		Number	Aggregate length in feet.....	No. of bridges	No. of conduits.	No. of trestles	No. of bridges	No. of conduits	No. of trestles.....	
99 Rock Island & Peoria .....	..	3	8	4	2,276.00	89	7,641.00	..	..	8	..	..	..	189
100 St. Louis, Alton & Springfield .....	..	1	3	..	1,158.00	200	10,992.00	..	..	..	..	..	..	100
101 St. Louis, Alton & Terre Haute .....	..	1	..	..	57.00	24	2,135.00	..	..	..	..	..	..	37
102 Belleville & Carondelet .....	..	..	..	..	..	24	2,135.00	..	..	..	..	..	..	101
103 Belleville & Eldorado .....	..	..	..	..	..	95	9,010.00	..	..	..	..	..	..	102
104 Belleville & Southern Illinois .....	..	1	..	..	260.00	55	3,342.00	..	..	..	..	..	..	103
105 Chicago, St. Louis & Paducah .....	..	1	13	..	929.00	88	9,066.00	..	..	1	..	..	..	62
106 St. Louis Southern .....	..	..	..	3	345.00	66	9,991.00	..	..	..	..	..	..	104
107 Carondelet & Shawneetown .....	..	..	..	..	..	..	..	..	..	..	..	..	..	55
108 St. Louis & Peoria .....	..	..	22	..	2,916.00	..	..	2	..	..	..	..	..	105
109 Terminal Railroad Ass'n of St. Louis .....	..	4	4	..	1,719.92	1	1,882.33	..	..	..	..	..	..	13
110 St. Louis Bridge .....	..	1	..	..	4,488.00	..	..	..	..	..	..	..	..	106
111 Terre Haute & Indianapolis (a) .....	..	..	..	..	..	..	..	..	..	..	..	..	..	7
112 Terre Haute, Vandalia & Terre Haute .....	..	1	1	..	1,128.66	70	9,500.00	..	..	..	..	..	..	107
113 Terre Haute & Peoria .....	..	1	1	..	830.00	916	13,294.00	9	..	..	..	..	..	2
114 Toledo, Peoria & Western	5	31	31	1	3,623.33	288	13,494.16	..	..	..	..	..	..	111
115 Toledo, St. Louis & Kansas City .....	..	2	8	..	1,199.50	150	28,919.17	6	..	..	..	..	..	175
116 Wabash	14	31	18	..	9,451.60	1,241	57,792.00	..	..	2	1	..	..	92
117 Wabash, Chester & Western .....	..	..	..	1	60.00	73	6,560.00	..	..	..	..	..	..	116
121 Totals	779	776	1,387	61	233,445.95	10,009	767,563.48	171	3	133	28	4	22	839
														118
														33
														121
														11,792

(c) Inserted to show relation of following subsidiary lines.

TABLE XII.—Consumption of Fuel by Locomotives,

	1	2	3	4	5	6	7
NAME OF COMPANY.	PASSENGER.						
	Coal— tons.	WOOD—CORDS.		Total fuel con- sumed— tons.	Miles run.	AV. pounds consumed per mile.	
		Hard.	Soft.				
1 Atchison, Topeka & Santa Fe (1).....							
2 Chicago, Santa Fe & California.....	50,279.00	1,159.00		51,045.00	952,959.00	107.00	
5 Baltimore & Ohio.....	2,283.00		13.00	2,299.50	80,733.00	56.71	
9 Chicago & Alton.....	58,863.11	1,159.76		59,636.28	1,524,953.00	78.21	
13 Chicago & Eastern Illinois.....	26,271.00	397.00		26,536.00	595,339.00	89.14	
17 Chicago & Grand Trunk.....	4,079.66			4,079.66	125,309.00	65.00	
21 Chicago & Northwestern.....	100,661.00	1,054.00	2,110.00	102,418.66	2,771,373.00	73.91	
23 Chicago & Ohio River.....	570.00	24.00		586.00	18,475.00	63.43	
34 Chicago, Milwaukee & St. Paul.....	17,933.00		490.00	18,179.00	490,123.00	74.17	
35 Chicago, Rock Island & Pacific.....	39,314.00	1,032.00		40,002.00	1,243,966.00	64.31	
37 Chicago, St. Paul & Kansas City.....	13,516.00	264.00		13,692.00	320,448.00	85.45	
39 Cleveland, Cincinnati, Chi. & St. L.....	38,917.00	314.00		39,126.00	1,105,127.00	70.80	
40 Kankakee & Seneca.....	1,113.00		16.00	1,121.00	32,372.00	69.26	
41 Peoria & Eastern.....	9,760.00	172.00		9,875.00	295,928.00	66.74	
45 Elgin, Joliet & Eastern.....							
46 Fulton County Narrow Gauge.....	785.00	38.00		810.00	38,186.00	42.42	
46 Grand Tower & Cape Girardeau.....	850.00			850.00	26,681.00	63.72	
49 Grand Tower & Carbondale.....	900.00			900.00	25,821.00	69.71	
50 Illinois Central.....	119,600.00	3,693.75		122,062.50	3,589,472.00	68.97	
61 Indiana & Illinois Southern.....	721.00	15.00		731.00	33,915.00	43.10	
62 Indianapolis, Decatur & Western.....	3,595.00			3,595.00	147,007.00	48.90	
63 Indiana, Illinois & Iowa.....							
64 Iowa Central.....	3,946.50	100.00		4,033.16	131,752.00	60.92	
73 Lake Erie & Western.....	3,967.00	186.00		4,091.00	209,131.00	39.10	
74 Lake Shore & Michigan Southern.....	5,963.00	34.00		5,986.00	201,425.00	59.54	
75 Louisville & Nashville.....	10,841.12		147.00	10,914.62	272,637.00	80.07	
77 Louisville, Evansville & St. L., Con.....	8,907.00		6.00	8,910.00	213,700.00	83.38	
78 Michigan Central.....	6,930.00			6,930.00	168,491.00	82.26	
80 Mobile & Ohio.....	5,627.00		32.00	5,648.00	275,488.00	41.08	
83 New York, Chicago & St. Louis.....	546.40	4.60		548.70	13,216.00	84.21	
85 Northern Pacific (1).....							
86 Wisconsin Central lines.....	6,938.06	253.04		7,106.76	207,016.00	68.73	
88 Ohio & Mississippi.....	23,569.00	292.00		23,730.00	741,185.00	64.03	
89 Pawnee.....	118.00		10.00	123.00	3,385.00	72.67	
90 Pennsylvania Co. (1).....							
92 Pitts., Ft. Wayne & Chi.....	2,883.00	62.00		2,924.00	99,936.00	58.52	
93 South Chi. & Southern.....	741.05	17.63		752.80	26,858.00	56.06	
94 Peoria & Pekin Union.....	828.50		11.00	834.00	34,027.00	49.00	
95 Peoria, Decatur & Evansville.....	5,865.00	177.00		5,983.00	282,651.00	42.36	
96 Pitts., Cincinnati, Chicago & St. L.....	3,392.00	44.00		3,422.00	102,820.00	66.60	
99 Rock Island & Peoria.....	2,505.00	95.00		2,568.33	125,149.00	41.03	
101 St. Louis, Alton & Terre Haute.....	19,388.00	274.00		10,571.00	352,119.00	60.04	
109 St. Louis & Peoria.....							
112 Terre Haute & Indianapolis.....	24,911.00	812.00		25,552.00	726,721.00	67.50	
114 Terre Haute & Peoria.....	9,153.00	85.00		9,210.00	261,370.00	70.00	
115 Toledo, Peoria & Western.....	7,674.00		332.40	7,840.20	322,817.00	48.57	
116 Toledo, St. Louis & Kansas City.....	7,551.65			7,551.65	197,798.00	76.00	
118 Wabash.....	52,273.00		1,314.00	52,927.00	1,601,799.00	66.10	
121 Wabash, Chester & Western.....	1,174.00			1,174.00	48,594.00	48.32	
Totals.....	696,763.05	11,748.78	4,481.40	706,845.82	19,988,267.00	70.72	

(1) Inserted to show relation of following subsidiary lines.

in Tons, in Illinois, for year ending June 30, 1892.

8	9	10	11	12	13	
FREIGHT.						
Coal—tons.	WOOD—CORDS.		Total fuel consumed—tons.	Miles run.	Average pounds consumed per mile.	
	Hard.	Soft.				
89,385.00	2,043.00		90,747.00	1,741,217.00	104.00	1
4,744.00		17.00	4,752.50	66,953.00	141.96	2
130,639.62	2,087.20		132,031.09	2,730,423.00	96.71	5
50,947.00	770.00		51,460.00	990,821.00	103.87	9
9,614.02			9,614.02	209,549.00	92.00	13
190,718.00	1,620.00	3,148.00	193,372.00	3,696,560.00	104.62	17
1,531.00	72.00		1,579.00	49,883.00	63.30	21
33,305.00		911.00	33,760.00	914,133.00	73.86	23
89,313.00	1,815.00		90,523.00	2,290,278.00	79.05	34
47,279.00	773.00		47,794.00	825,673.00	114.38	35
106,056.00	544.00		106,419.00	1,937,202.00	108.87	37
1,589.00		21.00	1,599.00	39,602.00	80.75	39
23,436.00	216.00		23,580.00	364,658.00	129.33	40
37,580.00		530.00	37,845.00	517,089.00	146.37	41
1,571.00	78.00		1,623.00	44,186.00	73.46	45
1,635.00			1,635.00	41,188.00	79.39	46
2,700.00			2,700.00	59,369.00	90.96	48
320,079.00	7,185.70		324,879.46	5,384,558.00	120.67	49
1,683.00	27.00		1,701.00	35,402.00	96.16	61
4,131.00			4,131.00	100,121.00	82.52	62
7,646.13	18.42		7,658.41	213,456.00	71.81	63
11,291.00	167.00		11,312.34	273,954.00	82.58	64
12,131.00	248.00		12,296.00	254,501.00	96.80	73
3,542.00	10.00		3,549.00	82,874.00	85.71	74
29,655.61		353.80	29,822.54	498,379.00	119.68	75
13,789.00		10.00	13,794.00	191,288.00	144.22	77
13,692.00			13,692.0	270,149.00	101.36	78
25,279.00		145.50	25,376.00	563,499.00	90.24	80
4,712.20	32.00		4,728.20	64,495.00	146.40	83
14,505.04	345.90		14,735.64	294,835.00	99.96	85
53,586.00	637.00		54,010.00	1,064,996.00	101.42	86
354.00		30.00	369.00	10,155.00	72.68	88
8,226.00	131.00		8,314.00	152,969.00	108.74	89
540.60	10.37		547.50	9,090.00	120.47	90
16,258.00	267.00		16,436.00	363,907.00	90.33	92
10,157.00	107.00		10,228.00	183,883.00	111.20	94
15,601.00	252.00		15,769.00	301,469.00	104.61	95
30,063.00	517.00		30,407.00	625,902.00	97.16	99
872.00			872.00	15,024.00	116.00	101
39,292.00	1,552.00		40,327.00	832,739.00	96.50	109
7,689.00	72.00		7,737.00	174,079.00	89.00	112
26,693.75		422.10	26,904.80	641,996.00	83.82	114
24,067.79			24,067.79	425,654.00	113.00	115
137,694.00		2,140.00	138,764.00	2,741,701.00	101.20	116
1,313.46			1,313.46	25,104.00	104.64	118
1,746,496.25	21,597.52	7,708.40	1,674,765.75	32,324,363.00	103.63	121

TABLE XII.—Consumption of Fuel by

NAME OF COMPANY.	14	15	16	17	18	19
	SWITCHING.					
	COAL— Tons.	WOOD—CORDS		Total fuel con- sumed— tons.	Miles run.	Av. pounds consumed per mile.
		Hard.	Soft.			
1 Atchis'n, Top'ka & Santa F. ⁽¹⁾						
2 Chicago, Santa Fe & Cal.....	23,345.00	442.00		23,640.00	768,600.00	62.00
3 Baltimore & Ohio.....	1,473.00			1,473.00	33,411.00	88.17
7 Belt Railway of Chicago.....	41,947.00	155.00		42,050.33	1,220,342.00	68.91
8 Centralia & Chester ⁽²⁾						
9 Chicago & Alton.....	27,977.34	801.39		28,511.60	1,037,484.00	54.96
12 Chi. & Calumet Terminal.....	9,521.00	270.00		9,701.00	132,151.00	147.00
13 Chicago & Eastern Illinois.....	16,892.00	255.00		17,062.00	442,830.00	77.05
17 Chicago & Grand Trunk.....	2,652.42			2,652.42	99,524.00	53.00
21 Chicago & Northwestern.....	74,128.00	900.00	2,090.00	75,773.00	2,660,292.00	56.97
23 Chicago & Ohio River.....	171.00			171.00	5,542.00	61.71
25 Chi., Burlington & Northern ⁽²⁾						
27 Chicago & Iowa.....						
34 Chi., Milwaukee & St. Paul.....	11,209.00		307.00	11,362.00	303,923.00	74.77
35 Chi., Rock Island & Pacific.....	30,752.00	1,506.00		31,756.00	1,455,023.00	43.65
37 Chi., St. Paul & Kansas City.....	4,604.00	109.00		4,677.00	115,950.00	80.67
39 Cerve., Cin., Chi. & St. Louis.....	18,361.00	178.00		18,479.00	599,409.00	61.32
40 Kankakee & Seneca.....	202.00		2.00	203.00	7,581.00	53.55
41 Peoria & Eastern.....	2,719.00	50.00		2,743.00	85,748.00	63.98
43 East St. Louis & Carondelet.....	3,217.00	138.00		3,309.00	124,772.00	53.04
45 Elgin, Joliet & Eastern.....	6,898.00		186.00	6,991.00	226,821.00	61.68
46 Fulton Co. Narrow Gauge.....						
48 Grand Tower & C. Girardeau.....						
49 Grand Tower & Carbondale.....						
50 Illinois Central.....	70,194.00	2,168.70		71,659.79	2,590,263.00	55.33
61 Indiana & Illinois Southern.....						
62 Indianap'lis, Decatur & West.....	2,132.00			2,132.00	71,945.00	59.28
63 Indiana, Illinois & Iowa.....	4,523.64	10.90		4,530.90	126,236.00	71.81
64 Iowa Central.....	2,646.00	39.00		2,672.00	64,742.00	82.54
73 Lake Erie & Western.....	2,548.00	103.00		2,617.00	109,261.00	47.90
74 Lake Shore & Mich. Southern.....	12,696.00	69.00		12,742.00	753,552.00	33.87
75 Louisville & Nashville.....	8,562.20		85.30	8,604.85	306,963.00	56.06
77 Louisv., Evansv. & St. L. Con.....	2,593.00		2.00	2,594.00	88,128.00	58.88
78 Michigan Central.....	9,980.00			9,980.00	723,033.00	27.60
80 Mobile & Ohio.....	3,690.00			3,690.00	235,090.00	31.39
83 New York, Chicago & St. L.....	10,272.40	258.00		10,401.40	380,106.00	54.73
85 Northern Pacific ⁽¹⁾						
86 Wisconsin Central Lines.....						
88 Ohio & Mississippi.....	7,183.00	109.00		7,256.00	269,727.00	53.80
89 Pawnee.....	16.00			16.00	400.00	80.00
90 Pennsylvania Co. ⁽¹⁾						
92 Pittsburgh, Ft. W. & Chi.....	2,239.00	36.00		2,263.00	73,743.00	56.76
93 South Chicago & Southern.....						
94 Peoria & Pekin Union.....	13,807.50		186.00	13,900.50	566,890.00	49.00
95 Peoria, Decatur & Evansville.....	1,447.00	21.00		1,461.00	96,459.00	30.29
96 Pittsb., Cin., Chi. & St. Louis.....	2,249.00	68.00		2,294.00	70,692.00	64.90
99 Rock Island & Peoria.....	1,668.00	30.00		1,688.00	99,908.00	33.79
101 St. L., Alton & Perre Haute.....	8,062.00	257.00		8,233.00	318,437.00	51.71
109 St. Louis & Peoria.....						
110 Terminal R. R. Ass. of St. L.....	13,835.00	152.00		13,936.00		
112 Terre Haute & Indianapolis.....	5,493.00	534.00		5,819.00	212,675.00	54.90
114 Terre Haute & Peoria.....	1,281.00	12.00		1,289.00	37,404.00	69.00
115 Toledo, Peoria & Western.....						
116 Toledo, St. L. & Kansas City.....	6,035.92			6,035.92	161,102.00	75.03
118 Wabash.....	25,590.00		723.00	25,953.00	925,617.00	56.40
121 Wabash, Chester & Western.....						
Totals.....	494,803.42	8,671.99	3,581.30	502,352.71	17,607,923.00	57.06

(1) Inserted to show relation of following subsidiary lines.

(2) Cannot divide as between passenger and freight.

Locomotives in Illinois—Concluded.

20	21	22	23	24	25	26	27	28	29	30	
CONSTRUCTION.						Grand total fuel consumed —tons.	Grand total miles run.	Av. pounds con- sumed per mile.	Av. cost coal per ton at distrib- uting point.....	Av. cost wood frutting point.	Av. cost wood per cord at dis- tributing point.
COAL— TONS.	WOOD— CORDS.		Total fuel con- sumed— tons.	Miles run.	Av. pounds consumed per mile..						
	Hard	Soft.									
905.00	14.00		914.00	38,820.00	47.00	166,346.00	3,501,596.00	92.00	1.62	2.38	1
						8,515.00	181,097.00	94.03	1.74	1.05	2
3,201.00	12.00		3,209.00	88,288.00	72.60	45,259.33	1,308,630.00	69.17	1.85	3.20	7
						974.00	35,492.00	55.00	1.20		8
3,257.00	84.24		3,313.16	100,227.00	66.11	223,492.13	5,393,087.00	82.88	1.95	3.00	9
						9,701.00	132,151.00	147.00	1.66	3.61	12
3,112.00	47.00		3,143.00	126,318.00	49.76	98,201.00	2,155,308.00	91.12	1.20	2.50	13
381.43			381.43	8,527.00	89.00	16,728.53	442,909.00	76.00	2.03		17
8,066.00	100.00	220.00	8,242.67	297,058.00	55.50	379,806.33	9,425,283.00	80.59	1.86	2.48	21
8.00			8.00	192.00	83.33	2,344.00	74,092.00	63.27	1.10	1.25	23
						20,603.00	560,673.00	73.00	2.55	1.25	25
						7,895.00	275,285.00	57.00	1.95	3.17	27
1,601.00		44.00	1,623.00	44,075.00	73.65	64,924.00	1,752,256.00	74.10	1.99	1.61	34
2,251.00	121.00		2,332.00	119,046.00	39.18	164,613.00	5,108,313.00	64.45	1.60	2.20	35
608.00	8.00		613.00	14,062.00	87.25	66,766.00	1,286,133.00	103.84	1.83	2.45	37
1,650.00	10.00		1,657.00	52,915.00	64.51	165,681.00	3,694,653.00	89.69	.96	1.64	39
9.00		1.00	10.00	100.00	20.00	2,933.00	79,655.00	73.64	1.52	1.44	40
9.22	16.00		933.00	26,984.00	69.15	37,131.00	773,318.00	96.03	1.04	1.28	41
						3,309.00	124,772.00	53.04	1.20	2.70	43
938.00		17.00	946.50	20,000.00	94.65	45,782.50	763,910.00	119.86	1.56	2.75	45
						2,433.00	82,372.00	59.67	1.12	2.00	46
						2,485.00	67,869.00	73.09	1.10		48
						3,600.00	85,190.00	84.52	1.00		49
9,714.00	233.00		9,869.33	366,519.00	53.85	528,461.08	11,880,812.00	88.96	.97	2.15	50
						2,432.00	69,317.00	70.19	.93	1.13	61
290.00			290.00	8,338.00	69.76	10,148.00	327,411.00	61.99	1.24		62
229.63	.56		230.00	6,411.60	71.81	12,419.31	346,153.00	71.81	1.31	2.25	63
383.00			383.00	12,870.00	59.52	18,380.50	483,318.00	76.06	1.15	2.00	64
460.00	20.00		473.00	18,262.00	51.89	19,477.00	591,155.00	65.90	1.65	2.12	73
6.13			6.13	800.00	40.86	22,283.13	1,038,151.00	42.99	1.49		74
513.36		5.80	516.26	21,754.00	47.46	19,858.27	1,099,733.00	90.67	.87	1.82	75
946.00			946.00	34,446.00	54.91	26,244.00	527,562.00	99.49	.79	1.25	77
207.00			207.00	10,324.00	40.10	30,809.00	1,171,997.00	61.10	1.70		78
1,032.00			1,032.00	62,097.00	33.24	35,746.00	1,136,169.00	63.03	1.20	.50	80
176.20			176.20	3,621.00	97.32	15,854.50	461,438.00	68.71	1.66	1.27	83
											85
362.09	15.26		372.26	13,220.00	54.80	22,214.66	515,071.00	86.26	2.37	2.10	86
3,155.00	57.00		3,193.00	86,897.00	73.48	88,189.00	2,162,805.00	81.55	.86	1.11	88
						508.00	13,940.00	72.88	1.62	1.20	89
											90
362.00	13.00		370.00	14,945.00	49.57	13,871.00	347,593.00	79.81	1.34	2.80	92
						1,300.32	35,948.00	72.34	1.45	2.99	93
						14,734.50	600,917.00	49.00	1.07	2.00	94
326.00	10.00		332.00	9,063.00	73.31	24,212.00	752,080.00	64.38	.97	1.25	95
374.00	6.00		378.00	11,986.00	63.19	16,322.00	369,331.00	88.40	1.14	2.00	96
210.00	10.00		216.33	8,725.00	49.51	20,241.66	535,251.00	75.63	1.57	3.68	99
1,026.00	33.00		1,048.00	41,941.00	49.97	50,259.00	1,338,399.00	75.10	.75	1.00	101
						872.00	15,024.00	116.00	.60		109
						13,936.00			1.14	3.25	110
873.00	44.00		903.00	38,901.00	46.40	72,631.00	1,811,136.00	79.10	1.05	2.18	112
183.00	2.00		184.00	2,385.00	154.00	18,420.00	475,238.00	78.00	1.40	1.95	114
670.00		31.00	687.00	35,112.00	39.13	35,432.00	999,925.00	70.87	1.10		115
555.99			555.99	15,577.00	69.00	38,191.35	799,531.00	95.00	1.10		116
2,835.00		45.00	2,908.00	98,343.00	53.10	220,552.00	5,367,460.00	82.20	1.16	1.75	118
						2,487.46	73,698.00	67.35	.75		121
50,916.05	856.06	366.80	52,582.26	1,858,649.00	61.96	2,966,019.56	72,650,657.00	81.65	.....	.....

TABLE XIII.—*Accidents in Illinois for*

1	2	3	4	5	6	7	8	9	10	11	12	13
NAME OF COMPANY.	PAS- SENGERS.			EMPLOYES.			OTHERS.			TOTAL.		GRAND TOTAL.....
	Killed....	Injured...	Total....	Killed....	Injured...	Total....	Killed....	Injured...	Total....	Killed....	Injured...	
1 Atchison, Topeka & Santa Fe.....(1)	...	...	...	...	...	...	...	...	...	...	...	...
2 Chi., Santa Fe & California.....	1	11	12	4	50	54	16	16	32	21	77	98
5 Baltimore & Ohio.....	...	...	...	1	8	9	3	4	7	4	12	16
7 Belt Railway of Chicago.....	...	...	...	3	50	53	5	4	9	8	54	62
9 Chicago & Alton.....	...	...	...	14	38	52	13	29	42	27	67	94
12 Chicago & Calumet Terminal.....	...	...	...	...	5	5	...	1	1	...	6	6
13 Chicago & Eastern Illinois.....	3	42	45	12	158	170	19	25	44	34	225	259
14 Chicago & Western Indiana.....	...	...	...	...	38	38	...	7	...	4	40	44
16 Chicago & Erie.....	...	...	...	...	6	6	12	13	25	14	24	38
17 Chicago & Grand Trunk.....	...	5	5	...	72	72	94	76	40	116	101	126
21 Chicago & Northwestern.....	3	14	17	22	2	2	6	11	17	8	11	19
22 Chicago & Northern Pacific.....	...	...	...	...	1	1	1	1	2	1	2	3
23 Chicago & Ohio River.....	1	1	2	...	17	17	...	...	...	1	18	19
25 Chi., Burlington & Northern.....	7	3	10	33	28	61	51	14	65	91	45	136
26 Chicago, Burlington & Quincy.....	1	...	...	1	11	13	1	1	2	4	12	16
27 Chicago & Iowa.....	...	...	...	...	...	...	...	...	...	...	...	...
28 Galesburg & Rio.....	...	...	...	4	4	8	3	2	5	7	6	13
32 St. Louis, Rock Island & Chicago	...	...	...	...	8	6	14	38	12	50	46	18
34 Chicago, Milwaukee & St. Paul.....	2	1	3	9	10	19	27	4	31	38	15	53
35 Chicago, Rock Island & Pacific.....	...	...	...	3	5	8	...	4	4	3	9	12
37 Chi., St. Paul & Kansas City.....	...	...	...	3	6	9	14	3	17	17	9	26
39 Cleveland, Cin., Chi. & St. Louis..	...	2	2	1	22	23	...	2	2	1	26	27
41 Peoria & Eastern.....	...	...	...	...	5	5	...	...	...	...	5	5
43 East St. Louis & Carondelet.....	...	...	...	3	11	14	...	1	1	3	12	15
44 East St. Louis Connecting.....	...	...	...	2	18	20	1	...	1	3	18	21
45 Elgin, Joliet & Eastern.....	...	...	...	...	...	...	...	2	2	...	2	2
46 Fulton County Narrow Gauge.....	...	...	...	...	4	4	...	...	...	...	4	4
49 Grand Tower & Carbondale.....	5	76	81	30	518	578	81	150	231	116	774	890
50 Illinois Central.....	...	...	...	1	15	15	1	1	2	3	1	4
62 Indianapolis, Decatur & Western.....	...	...	...	3	43	46	1	1	2	4	44	48
63 Indiana, Illinois & Iowa.....	...	...	...	...	7	8	1	1	2	2	8	10
64 Iowa Central.....	...	...	...	8	11	19	13	10	23	21	21	42
73 Lake Erie & Western.....	...	4	4	...	37	37	5	...	5	5	41	46
74 Lake Shore & Michigan Southern.....	...	...	...	3	14	17	2	1	3	5	15	20
75 Louisville & Nashville.....	...	...	...	3	3	6	1	2	3	4	5	9
77 Loui-v., Evansv. & St. Louis Con.	...	...	...	1	24	25	2	...	2	3	24	27
78 Michigan Central.....	...	...	...	39	39	...	...	1	1	...	40	40
80 Mobile & Ohio.....	...	...	...	...	...	...	...	...	...	...	...	...
83 New York, Chicago & St. Louis ..	...	...	...	2	2	1	2	3	1	4	5	5
85 Northern Pacific(1).....	...	...	...	...	...	...	...	...	...	...	...	...
86 Wisconsin Central Lines.....	24	24	2	54	56	5	10	15	7	88	95	95
88 Ohio & Mississippi.....	...	...	...	...	...	...	...	...	...	...	...	...
90 Pennsylvania Co (1).....	5	5	10	55	65	13	50	63	23	110	133	133
92 Pittsburgh, Ft. W. & Chicago ..	...	...	...	1	1	...	...	...	...	...	...	...
93 St. Louis Chicago & Southern.....	...	...	...	28	31	...	2	2	3	30	33	33
94 Peoria & Pekin Union.....	...	1	1	19	19	1	1	1	2	1	21	22
95 Peoria, Decatur & Evansville.....	1	1	2	44	46	12	22	34	14	67	81	81
96 Pittsburgh, Cin., Chi. & St. Louis.	...	...	...	1	1	...	...	...	...	...	1	1
97 Englewood Connecting.....	...	...	...	11	11	2	2	4	2	13	15	15
99 Rock Island & Peoria.....	...	...	...	8	11	11	3	14	14	11	25	25
101 St. Louis, Alton & Terre Haute ..	1	...	...	1	1	1	1	2	2	2	4	4
110 Terminal R. R. Ass'n of St. L.....	...	2	2	1	21	22	3	11	14	4	34	38
112 Terre Haute & Indianapolis.....	...	...	...	18	18	...	...	...	...	...	18	18
114 Terre Haute & Peoria.....	...	...	...	12	13	1	...	1	2	12	14	14
115 Toledo, Peoria & Western.....	...	2	2	67	70	2	2	4	5	71	76	76
116 Toledo, St. L. & Kansas City.....	1	11	12	66	78	23	38	61	36	115	151	151
118 Wabash.....	...	...	...	1	1	1	...	1	1	1	1	2
121 Wabash, Chester & Western.....	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	25	205	230	218	1,727	1,945	477	508	985	720	2,440	3,160

(1) Inserted to show relation of following subsidiary lines.

the year ending June 30, 1892.

14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
KIND OF ACCIDENT.																			
COUPLING AND UN- COUPLING.		FALL'NG FROM TRAINS AND EN- GINES.		OVER- HEAD OB- STRU- CTIONS.		COL- LIS- IONS.		DE- RAIL- MENTS.		OTHER TRAIN AC- CIDENTS.		AT- HIGH- WAY CROSS- INGS.		AT STA- TIONS.		OTHER CAUSES.			
Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...	Killed...	Injured...		
2	15	1	7	1	4	1	13	5	3	5	3	14	24	1	2	2	2	1	
1	22	3	1	1	1	1	2	2	5	1	2	7	6	2	2	2	2	2	
3	56	5	20	5	9	10	2	9	10	1	34	11	84	3	12	3	12	13	
1	9	3	3	3	2	2	1	2	1	5	2	3	4	1	14	1	14	16	
9	53	4	12	6	11	17	25	15	13	7	50	33	20	1	17	1	17	21	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	
7	12	1	4	1	12	6	4	2	13	5	7	1	15	7	7	15	7	25	
5	3	1	5	1	2	1	1	1	1	1	1	1	1	1	1	1	1	26	
1	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	27	
4	1	1	5	1	2	1	1	1	1	1	1	1	1	1	1	1	1	28	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	29	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	30	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	32	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	33	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	34	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	35	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	36	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	37	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	38	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	39	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	40	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	41	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	42	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	45	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	46	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	47	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	48	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	49	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	50	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	51	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	52	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	53	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	54	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	55	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	56	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	57	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	58	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	59	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	60	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	61	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	62	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	63	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	64	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	65	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	66	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	67	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	68	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	69	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	70	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	71	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	72	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	73	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	74	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	75	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	76	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	77	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	78	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	79	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	80	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	81	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	82	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	83	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	84	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	85	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	86	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	87	
1	1	1	1	1	1	1	1	1	1	1	1	1	1						

TABLE XIV.—*Taxes paid in Illinois.*

	1	2	3	4	
	NAME OF COMPANY.	1890.	1891.	1892.	
1	Atchison, Topeka & Santa Fe ⁽¹⁾				1
2	Chicago, Santa Fe & California.....	\$112,197 79	\$78,350 71	\$97,049 82	2
5	Baltimore & Ohio.....	14,512 28	17,038 48	15,222 75	5
7	Belt Railway of Chicago.....	28,000 00	30,500 00	33,300 00	7
8	Centralla & Chester.....			752 20	8
9	Chicago & Alton.....	186,403 13	194,920 56	205,459 72	9
12	Chicago & Calumet Terminal.....		4,391 50	6,918 91	12
13	Chicago & Eastern Illinois.....	74,075 82	75,634 98	75,750 01	13
16	Chicago & Erie.....	31,055 29	2,525 28		16
17	Chicago & Grand Trunk.....	41,140 57	46,734 01	49,902 78	17
20	Chicago & Indiana State Line.....			3,088 65	20
21	Chicago & Northwestern.....	188,485 86	208,266 41	238,626 94	21
22	Chicago & Northern Pacific.....			33,684 70	22
23	Chicago & Ohio River.....	7,752 78	5,615 77	2,123 89	23
25	Chicago, Burlington & Northern.....	20,884 01	21,454 10	22,757 58	25
26	Chicago, Burlington & Quincy.....	295,403 11	310,478 52	308,242 00	26
27	Chicago & Iowa.....	16,556 87	18,455 14	18,951 55	27
28	Galesburg & Rio.....	1,485 25	1,795 85	2,371 44	28
29	Illinois Valley & Northern.....	8,389 46	9,810 51	10,323 77	29
30	Liverpool Coal.....			226 76	30
32	St. Louis, Rock Island & Chicago.....	50,455 14	48,671 84	53,110 59	32
34	Chicago, Milwaukee & St. Paul.....	90,608 40	97,423 74	99,364 20	34
35	Chicago, Rock Island & Pacific.....	148,505 77	177,180 94	151,647 32	35
37	Chicago, St. Paul & Kansas City.....	22,681 31	23,498 01	27,697 34	37
39	Cleveland, Cincinnati, Chicago & St. Louis..	135,471 88	140,721 00	143,127 33	39
40	Kankakee & Seneca.....	6,496 59	6,133 05	10,065 49	40
41	Peoria & Eastern.....	14,453 28	23,127 37	33,567 71	41
42	De Pue, Ladd & Eastern.....	150 15	253 84	249 28	42
43	East St. Louis & Carondelet.....	3,155 72	3,550 48	3,014 80	43
44	East St. Louis Connecting.....	2,100 54	6,885 49	1,727 29	44
45	Elgin, Joliet & Eastern.....	17,524 86	21,992 90	28,002 12	45
46	Fulton County Narrow Gauge.....	2,589 81	2,355 73	2,170 10	46
48	Grand Tower & Cape Girardeau.....		4,527 17	2,448 09	48
49	Grand Tower & Carbonale.....	5,030 60	4,940 96	4,917 52	49
50	Illinois Central.....	555,634 39	⁽²⁾ 599,064 51	⁽³⁾ 645,905 80	50
61	Indiana & Illinois Southern.....	5,844 41	5,178 78	3,358 23	61
62	Indianapolis, Decatur & Western.....	13,592 30	13,885 05	15,279 98	62
63	Indiana, Illinois & Iowa.....	8,826 94	13,792 95	9,957 69	63
64	Iowa Central.....	12,067 10	16,273 12	14,445 19	64
67	Jacksonville Southeastern Line.....	20,467 30	33,735 07		67
73	Lake Erie & Western.....	18,062 88	20,279 19	21,325 78	73
74	Lake Shore & Michigan Southern.....	48,069 91	47,358 64	61,509 74	74
75	Louisville & Nashville.....	37,232 93	36,807 57	45,140 25	75
77	Louisville, Evansville & St. Louis, Cons'd..	17,652 22	17,407 88	27,448 44	77
	Louisville, New Albany & Chicago.....	14,513 90			
78	Michigan Central.....	18,617 45	19,152 28	19,093 90	78
80	Mobile & Ohio.....	28,755 58	27,344 80	32,300 59	80
83	New York, Chicago & St. Louis.....	18,756 70	23,611 94	22,975 13	83
85	Northern Pacific ⁽⁴⁾				85
86	Wisconsin Central Lines.....	13,911 01	11,617 92	23,490 37	86
88	Ohio & Mississippi.....	86,134 03	86,259 47	96,797 87	88
89	Pawnee.....		121 55	379 00	89
90	Pennsylvania Co. ⁽⁵⁾				90
91	Calumet River.....	1,257 38			91
92	Pittsburgh, Ft. Wayne & Chicago.....	66,548 52	75,526 79	71,315 85	92
93	South Chicago & Southern.....	4,667 25	2,745 72	2,639 16	93
94	Peoria & Pekin Union.....	22,956 45	21,213 20	21,182 91	94
95	Peoria, Decatur & Evansville.....	34,193 90	26,506 89	28,375 21	95
96	Pittsburgh, Cincinnati, Chicago & St. Louis	49,221 21	58,195 94	59,320 12	96
97	Englewood Connecting.....	1,813 33	1,470 78	1,918 67	97
98	Quincy, Omaha & Kansas City.....	1,206 57			98
99	Rock Island & Peoria.....	23,296 44	25,490 50	27,151 99	99
100	St. Louis, Alton & Springfield.....	8,655 21	6,098 74	6,400 98	100

Table XIV. Taxes paid in Illinois.—Concluded.

1	NAME OF COMPANY.	2	3	4	
		1890.	1891.	1892.	
101	St. Louis, Alton & Terre Haute.....	36,921 65	41,581 26	43,854 14	101
108	St. Louis & Eastern.....			271 98	108
109	St. Louis & Peoria	800 00	1,200 00	1,200 00	109
110	Terminal Railroad Association of St. Louis.	36,457 54	35,801 13	31,604 86	110
112	Terre Haute & Indianapolis ⁽¹⁾				112
113	St. Louis, Vandalia & Terre Haute.....	52,341 70	48,455 76	55,964 13	113
114	Terre Haute & Peoria	14,996 64	13,025 11	15,007 95	114
115	Toledo, Peoria & Western.....	34,836 45	34,345 69	36,246 88	115
116	Toledo, St. Louis & Kansas City.....	13,787 79	22,760 00	25,125 87	116
118	Wabash	171,202 60	170,588 31	200,029 59	118
121	Wabash, Chester & Western.....	3,025 36	2,665 60	2,882 85	121
	Total.....	\$3,021,904 49	\$3,145,914 48	\$3,357,662 96	

(¹) Inserted to show relation of following subsidiary lines.

(²) Includes \$520,949.35, proportion of gross receipts due the State of Illinois.

(³) Includes \$571,724.72, proportion of gross receipts due the State of Illinois.

CROSSINGS EQUIPPED WITH INTERLOCKING AND SIGNALING DEVICES.

Number	LOCATION.	CROSSING OF	No. of levers or wheels.	Date of issuing of permit.....	By Whom Erected.	Style of Machine.
1	Chicago, 40th st.	Chicago, Rock Island & Pacific and Lake Shore & Michigan Southern with Union Stock Yards and Terminal Co.	44	May 25, 1892	Union S. & S. Co.	Saxby & Farmer.
2	Hogewisch.....	Michigan Central with South Chicago & Southern	4	Sept. 19, 1889	"	Wheel
3	Bloom.....	Chicago & Eastern Illinois with Michigan Central	4	Nov. 30, 1892	"	"
4	Turner Je.....	Egin, Joliet & Eastern with Chicago & Northwestern	8	Feb. 27, 1889	"	"
6	Joliet.....	Egin, Joliet & Eastern with Michigan Central	10	"	"	"
7	Peru.....	Chicago, Rock Is and & Pacific with Chicago, Burlington & Quincy.	4	May 16, 1889	"	"
8	Bloom.....	Egin, Joliet & Eastern with Chicago & Eastern Illinois	4	Nov. 30, 1892	"	"
9	Washington H.	Chicago, St. Louis & Pittsburgh with Chicago, Rock Island & Pacific.	10	April 5, 1889	"	"
10	Rockford.....	Chicago, Madison & Northern with Chicago & Iowa.	12	Feb. 27, 1889	"	Saxby & Farmer.
11	Mazon Bridge.	Chicago & Alton with Egin, Joliet & Eastern.	18	"	"	"
12	Matteson.....	Illinois Central with Egin, Joliet & Eastern.	13	July 30, 1889	"	"
13	Coal City.....	Egin, Joliet & Eastern with Chicago & Alton and Chicago, Santa Fe & California.	9	Jan. 17, 1890	Nat. S. & Sig. Co.	Randolph
14	Kensington.	Illinois Central with Chicago & Eastern Illinois.	7	Dec. 5, 1889	"	"
15	Ash St (Chic.)..	Chicago, Madison & Northern with Atchison, Topeka & Santa Fe and Chicago, St. Louis & Pittsburgh and Union Stock Yard Tracks.	54	"	Union S. & S. Co.	Saxby & Farmer.
16	Barrington.....	Waukegan & Northwestern with Chicago & Northwestern.	13	Jan. 3, 1890	"	"
17	Spaulding.....	Waukegan & Northwestern with Chicago, Milwaukee & St. Paul.	8	" 4, 1890	"	"
18	Leighton.....	Waukegan & Northwestern with Wisconsin Central	6	" 4, 1890	"	"
19	Clybourn Je.....	Chicago & Northwestern with Chicago, Milwaukee & St. Paul.	32	" 3, 1890	"	"
20	Grayland.....	Chicago & Northwestern with Chicago, Milwaukee & St. Paul.	10	" 3, 1890	"	"
21	Rondout.....	Egin, Joliet & Eastern with Chicago, Milwaukee & St. Paul.	6	" 25, 1890	"	Horizontal L.
22	Blue Island.....	Chicago & Calumet Terminal with Chicago & Grand Trunk.	7	Mar. 20, 1890	"	Saxby & Farmer.
23	Montrose.....	Chicago & Northwestern with Chicago, Milwaukee & St. Paul.	18	Nov. 30, 1892	"	"
24	Johnstone.....	Chicago & Calumet Terminal with Wabash Railroad	6	Mar. 20, 1890	"	"
25	Chicago, 49th st.	Chicago & Western Indiana Double Track Junction	23	"	"	"
26	Chicago, 79th st.	Chicago & Western Indiana with Chicago, Rock Island & Pacific.	28	"	"	"
27	Colona.....	Chicago, Rock Island & Pacific with Chicago, Burlington & Quincy	6	April 17, 1890	"	Horizontal L.
28	Dwight.....	Chicago & Alton with Indiana, Illinois & Iowa.	6	April 2, 1890	"	Saxby & Farmer.
29	Bridgeport.....	Chicago & Calumet Terminal with Chicago & Alton.	6	"	"	"
30	Gardner.....	Chicago, Madison & Northern, Chicago & Alton, and Atchison, Topeka & Santa Fe.	36	" 23, 1890	"	"
31	Galva.....	Chicago & Alton and Milwaukee & Seneca	6	May 21, 1890	"	Horizontal L.
32	Jacksonville Je.	Chicago, Burlington & Quincy with Rock Island & Peoria.	16	"	"	Saxby & Farmer.
33	Washington H.	Chicago & Alton with Jacksonville Southeastern	17	Nov. 12, 1890	"	Horizontal L.
34	Matteson.....	Chicago, Rock Island & Pacific with Chicago, St. Louis & Pittsburgh.	25	Sept. 20, 1890	"	Saxby & Farmer.
35	Tower Hill.....	Illinois Central with Michigan Central	11	"	Johnson Sig. Co.	Johnson.
36		Cleveland, Cincinnati, Chicago & St. Louis with Ohio & Mississippi.	12	Dec. 2, 1890	Union S. & S. Co.	Saxby & Farmer.

35	S. Englewood.	Chicago, Rock Island & Pacific Junction.	51	Feb.	11, 1891	Union S. & S. Co.	Saxby & Farmer.
36	61st St. Eng'w'd	Junction of Chicago, Rock Island & Pacific and Lake Shore & Michigan South- ern Rys.	11	Sept.	7, 1891	Lake Shore & M. S.	"
37	Pacific Junction	Two Divisions of the Chicago, Milwaukee & St. Paul Ry.	17	Mar.	2, 1891	Union S. & S. Co.	"
38	Glen Carbon	St. Louis & Eastern with Toledo, St. Louis & Kansas City Ry.	6	July	10, 1891	"	"
40	South Aurora	Elgin, Joliet & Eastern with Chicago, Burlington and Quincy Ry.	20	Oct.	7, 1891	"	"
41	Ottawa	Chicago, Rock Island & Pacific with the Chicago, Burlington & Quincy Ry.	18	Nov.	4, 1891	"	"
42	Waukegan	Chicago & Northwestern with Elgin, Joliet & Eastern Ry.	15	Dec.	9, 1891	"	"
43	Auburn Jc.	Chicago & Western Indiana R. R. Junction with Wabash R. R.	31	Dec.	1, 1891	Johnson R. R. S. Co.	Johnson.
44	Calumet River	Draw Bridge, Michigan Central R. R.	7	May	8, 1891	Union S. & S. Co.	Saxby & Farmer.
45	Hawthorn	Chicago, Madison & Northern and Chicago & Western Indiana R. R.	25	Feb.	2, 1892	Johnson R. R. S. Co.	Johnson.
46	St. Anne	Chicago & Eastern Illinois with Cleveland, Cincinnati, Chicago & St. Louis Ry.	19	June	19, 1892	Union S. & S. Co.	Saxby & Farmer.
47	121st St. Chicago	Pittsburgh, Cincinnati, Chicago & St. Louis and Blue Island Ry.	22	June	2, 1892	"	"
49	Thornton Jc.	Chicago & Eastern Illinois with Chicago & Grand Trunk Ry.	15	Nov.	30, 1892	"	Elec. Pneumatic.
50	Chi. River Draw	Chicago Terminus of Chicago & Northern Pacific R. R.	15	June	15, 1892	"	Saxby & Farmer.
51	Taylorville	Wabash R. R. with Ohio & Mississippi Ry.	7	Sept.	30, 1892	"	"
52	Calumet River	Chicago & Eastern Illinois R. R. Draw Bridge.	7	Sept.	27, 1892	"	"
53	Illinois River	Draw Bridge near Pearl, Chicago & Alton R. R.	17	Sept.	13, 1892	C. C. C. & St. L. Ry.	"
54	Kansas	Cleveland, Cincinnati, Chicago & St. Louis with Chicago & Ohio River R. R.	20	Oct.	18, 1892	National S. & S. Co.	National.
55	Springfield Jc.	Atchison, Topeka & Santa Fe with Chicago & Alton R. R.	15	Sept.	27, 1892	"	"
56	Princeton	Chicago & Alton and Wabash R. R. with Illinois Central Ry.	34	Dec.	31, 1892	"	"
57	Paducah Jc.	Chicago & Alton with Atchison, Topeka & Santa Fe R. R.	37	Sept.	13, 1892	Union	Saxby & Farmer.
58	Corwith	Chicago, Rock Island & Peoria, junction of its lines.	22	"	27, 1892	Johnson R. R. S. Co.	Johnson.
60	95th St. Chicago	Chicago & Eastern Illinois with Lake Erie & Western R. R.	21	Nov.	30, 1892	Union S. & S. Co.	Saxby & Farmer.
61	Hoopston	Chicago & Western Indiana, Chicago & Alton with Atchison Topeka & Santa Fe R. R.	27	Oct.	18, 1892	C. C. C. & St. L. Ry.	"
62	LeMoine	Cleveland, Cincinnati, Chicago & St. Louis with Terre Haute & Peoria Ry.	11	Nov.	18, 1892	Union S. & S. Co.	"
63	Paris	Chicago, Milwaukee & St. Paul with the Chicago & Northwestern Ry.	11	Nov.	30, 1892	"	"
64	East Kingston	Chicago & Northwestern with Chicago, Milwaukee & St. Paul Ry.	11	Nov.	30, 1892	"	"
65	Fulton Jc.	Chicago & Northwestern with Chicago, Milwaukee & St. Paul Ry.	11	Nov.	30, 1892	"	"
96	Fox River	Tamaroa & Northwestern with Chicago, Milwaukee & St. Paul R. R.	11	Nov.	30, 1892	"	"
67	Mt. Vernon	Tamaroa & Mt. Vernon Ry. with Louisville & Nashville Ry.	10	"	"	Johnson R. R. S. Co.	Johnson.
Total number levers.				1057			

LIST OF
RAILROAD OFFICIALS.

ATCHISON, TOPEKA & SANTA FE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	George C. Magoun	New York.....
President.....	Allen Manvel.....	Chicago, Ill.....
First Vice-President and Gen'l Auditor..	J. W. Reinhart.....	Boston, Mass.....
Second Vice-President.....	A. A. Robinson.....	Topeka, Kas.....
Third Vice-President.....	J. D. Springer.....	Chicago, Ill.....
Secretary and Treasurer	D. L. Gallup.....	".....
Assistant Treasurer.....	George L. Goodwin.....	Boston, Mass.....
Assistant Secretary.....	L. C. Denning.....	".....
General Counsel.....	Jno. J. McCook.....	New York.....
General Solicitor.....	George R. Peck.....	Topeka, Kas.....
Comptroller.....	Jno. P. Whitehead.....	Boston, Mass.....
Auditor of Disbursements.....	I. S. Lauck.....	Topeka, Kas.....
Assistant General Auditor.....	W. K. Gillett.....	".....
Auditor Freight Receipts.....	C. S. Sutton.....	".....
General Manager.....	A. A. Robinson.....	".....
Auditor Passenger Receipts.....	C. M. Atwood.....	".....
Chief Engineer.....	James Dun.....	".....
General Superintendent.....	H. R. Nickerson.....	".....
Superintendent Car Service.....	C. W. Kouns.....	".....
Freight Traffic Manager.....	J. A. Hanley.....	Chicago, Ill.....
Assistant Freight Traffic Manager.....	W. B. Biddle.....	".....
Superintendent of Telegraph.....	R. B. Gemmel.....	".....
Passenger Traffic Manager.....	W. F. White.....	".....
Assistant Passenger Traffic Manager.....	Jno. J. Byrne.....	".....
General Freight Agent.....	F. C. Gay.....	Topeka, Kas.....
Assistant General Freight Agent.....	J. G. Miller.....	Chicago, Ill.....
Assistant General Freight Agent.....	A. P. Tanner.....	Topeka, Kas.....
Assistant General Freight Agent.....	Charles R. Hudson.....	".....
General Passenger and Ticket Agent....	George T. Nicholson.....	".....
Asst. Gen'l Passenger and Ticket Agent.	William J. Black.....	".....
General Baggage Agent.....	P. Walsh.....	".....
Purchasing Agent.....	W. G. Tuller.....	Chicago, Ill.....
Land Commissioner.....	J. E. Frost.....	Topeka, Kas.....
General Claim Agent.....	C. M. Foulks.....	".....
Superintendent of Machinery.....	John Player.....	".....

CHICAGO, SANTA FE & CALIFORNIA RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	A. Manvel.....	Chicago, Ill.....
First Vice-President and Gen'l Auditor..	J. N. Reinhart.....	Boston, Mass.....
Second Vice-President.....	A. A. Robinson.....	Topeka, Kas.....
Third Vice-President.....	J. D. Springer.....	Chicago, Ill.....
Secretary and Treasurer	D. L. Gallup.....	".....
General Counsel.....	J. J. McCook.....	New York.....
General Solicitor.....	George R. Peck.....	Topeka, Kas.....
Comptroller.....	J. P. Whitehead.....	Boston, Mass.....
Assistant General Auditor.....	G. B. Howard.....	Chicago, Ill.....
Assistant Secretary.....	L. C. Denning.....	Boston, Mass.....
Assistant Treasurer.....	G. L. Goodwin.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Abram Poole	Chicago, Ill	1892
B. P. Cheney	"	1892
O. W. Peabody	"	1892
G. C. Magoun	New York	1893
J. J. McCook	"	1893
Norman Williams	Chicago, Ill	1893
A. Manvel	"	1894
C. L. Hutchinson	"	1894
Edson Keith	"	1894
J. B. Morrison	Ft. Madison, Ia	1895
J. D. Springer	Chicago, Ill	1895
Nelson Morris	"	1895
C. B. Farwell	"	1895

ATCHISON, TOPEKA & SANTA FE RAILROAD COMPANY, IN CHICAGO.

OFFICERS.

Title.	Name.	Location of Office.
President	Allen Manvel	Chicago, Ill
First Vice-President and Gen. Auditor	J. W. Reinhart	Boston, Mass
Second Vice-President	A. A. Robinson	Topeka, Kas
Third Vice-President	J. D. Springer	Chicago, Ill
Secretary and Treasurer	D. L. Gallup	"
General Counsel	J. J. McCook	New York
General Solicitor	G. A. Peck	Topeka, Kas
Assistant Treasurer	Geo. L. Goodwin	Boston, Mass
Comptroller	J. P. Whitehead	"
General Auditor	W. K. Gillett	Topeka, Kas
Assistant Auditor	Geo. B. Howard	Chicago, Ill
Assistant Secretary	L. C. Deming	Boston, Mass
Chief Engineer	James Dun	Topeka, Kas

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
D. L. Gallup	Chicago, Ill	1895
Norman Williams	"	1895
E. A. Hamill	"	1895
Thos. Baring	New York, N. Y.	1892
George C. Magoun	"	1892
B. P. Cheney	Boston, Mass	1892
A. Manvel	Chicago, Ill	1892
H. H. Bishop	"	1893
A. F. Fowne	"	1893
J. J. McCook	New York, N. Y.	1893
J. D. Springer	Chicago, Ill	1894
S. B. French	"	1894
O. S. A. Sprague	"	1894

The Saturday next following the last Thursday in October.

THE MISSISSIPPI RIVER RAILROAD & TOLL-BRIDGE COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Allen Manvel.....	Chicago, Ill.
Secretary	D. L. Gallup.....	" " " " " "
Treasurer.....	D. L. Gallup.....	" " " " " "
Comptroller.....	J. P. Whitehead.....	Boston, Mass.
General Auditor.....	J. W. Reinhart	" " " " " "
General Solicitor.....	Geo. A. Peck	Topeka, Kas.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Allen Manvel	Chicago, Ill.	} The Saturday next following the last Thursday in October, 1892.
J. T. Burr	Boston, Mass.	
J. D. Springer.....	Chicago, Ill.	
J. B. Morrison.....	Ft. Madison, Ia.	
Chas. H. Peters	" " " " " "	

BALTIMORE AND OHIO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
General Counsel.	J. K. Cowen.....	Baltimore, Md.
Auditor	Wm. T. Thelin	" " " " " "
General Manager.....	J. T. Odell.....	" " " " " "
Chief Engineer	H. T. Douglas.....	" " " " " "
General Superintendent.....	R. B. Campbell.....	Chicago, Ill.
Superintendent of Telegraph	Chas. Seldon.....	Baltimore, Md.
Traffic Manager.....	F. Harrott.....	" " " " " "
General Freight Agent.....	C. S. Wright.....	Pittsburgh, Pa.
General Passenger Agent.....	C. O. Seull.....	Baltimore, Md.
Assistant General Passenger Agent	L. S. Allen.....	Chicago, Ill.
General Baggage Agent	B. E. Peddicord.....	Baltimore, Md.
Agent in Illinois for transfer of stock.....	G. A. Richardson.....	Chicago, Ill.

BALTIMORE & OHIO & CHICAGO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.	Orland Smith	Baltimore, Md.
Secretary and Treasurer.....	G. A. Richardson.....	Chicago, Ill.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John Tyrell.....	Chicago, Ill.....	April, 1895.....
Orland Smith.....	Baltimore, Md.....	" ".....
Carroll Sprigg.....	New York, N. Y.....	" ".....
John K. Cowen.....	Baltimore, Md.....	" 1893.....
Geo. R. Dennis.....	Frederick, Md.....	" ".....
J. G. Lombard.....	Chicago, Ill.....	" 1894.....
James Walsh.....	".....	" ".....
C. C. Clark.....	".....	" ".....
H. E. Weaver.....	".....	" ".....

THE BELT RAILWAY COMPANY OF CHICAGO.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Volney T. Malott.....	Chicago, Ill.....
President.....	B. Thomas.....	".....
Secretary.....	M. J. Clark.....	".....
Treasurer.....	J. E. Murphy.....	".....
General Solicitor.....	C. M. Osborn.....	".....
Auditor.....	M. J. Clarke.....	".....
General Manager.....	B. Thomas.....	".....
Chief Engineer.....	F. C. Doran.....	".....
Master of Transportation.....	J. M. Warner.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
O. S. Lyford.....	Chicago, Ill.....	June 6, 1893.....
Wm. J. Spicer.....	Detroit, Mich.....	".....
Chas. M. Hays.....	St. Louis, Mo.....	".....
E. B. Thomas.....	New York, N. Y.....	".....
Sam'l Thomas.....	".....	".....

CENTRALIA & CHESTER RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	T. B. Needles.....	Nashville, Ill.....
Secretary.....	S. L. Dwight.....	Centralia, Ill.....
Treasurer.....	J. M. McCutcheon.....	Sparta, Ill.....
Auditor.....	R. H. Rosborough.....	".....
General Manager.....	J. M. McCutcheon.....	".....
Assistant General Manager.....	It. H. Rosborough.....	".....
General Freight Agent.....	H. G. Borneman.....	".....
General Passenger Agent.....	H. G. Borneman.....	".....
Agent in Illinois for transfer of stock.....	S. L. Dwight.....	Centralia, Ill.....

DIRECTORS.

Name.	Post-Office Address.	
T. B. Needles	Nashville, Ill	
S. L. Dwight	Centralia, Ill	
W. S. Forman	Nashville, Ill	
Jas. M. McCutcheon	Monmouth, Ill	
C. S. Smith	New York	
W. F. Wylie	Sparta, Ill	
Andrew Thompson	New York	

CHICAGO & ALTON RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	T. B. Blackstone	Chicago, Ill
Vice-President	J. C. McMullin	"
Secretary and Treasurer	C. H. Foster	"
General Solicitor	William Brown	"
Auditor	Chauncey Kelsey	"
General Manager	C. H. Chappell	"
Assistant General Manager	J. H. Wood	"
Chief Engineer	H. C. Draper	"
Superintendent of Transportation	T. M. Bates	Bloomington, Ill
Division Superintendent	A. M. Richards	"
Division Superintendent	W. K. Morley	Roodhouse, Ill
Superintendent of Telegraph	H. V. Miller	Bloomington, Ill
General Freight Agent	H. H. Courtright	Chicago, Ill
Assistant General Freight Agent	A. Newman	"
General Passenger Agent	J. Charlton	"
Assistant General Passenger Agent	George J. Charlton	"
General Baggage Agent	C. Huntington	"
Agent in Illinois for transfer of stock	C. H. Foster, Secretary	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
James C. McMullin	Chicago, Ill	1st Monday, Apr. '93
John A. Stewart	New York City	"
Albert A. Sprague	Chicago, Ill	"
John J. Mitchell	St. Louis, Mo.	1st Monday, Apr. '94
W. N. Blackstone	Norwich, Conn.	"
A. C. Bartlett	Chicago, Ill	"
T. B. Blackstone	"	1st Monday, Apr. '95
John B. Drake	"	"
Morris K. Jessup	New York City	"

JOLIET & CHICAGO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	John B. Drake.....	Chicago, Ill.....
Secretary.....	Charles H. Foster.....	".....
Agent in Illinois for transfer of stock....	Charles H. Foster, Secretary.	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
T. B. Blackstone.....	Chicago, Ill.....	1st Monday, Apr.'93
J. C. McMullin.....	".....	".....
John B. Drake.....	".....	".....
Norman Williams.....	".....	".....
Marshal Field.....	".....	".....

MISSISSIPPI RIVER BRIDGE COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	J. C. McMullin.....	Chicago, Ill.....
Secretary and Treasurer	C. H. Foster.....	".....
Agent in Illinois for transfer of stock....	C. H. Foster.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John J. Mitchell.....	St. Louis, Mo.....	1st Monday, Apr.'93
T. B. Blackstone.....	Chicago, Ill.....	".....
John B. Drake.....	".....	".....
A. A. Sprague.....	".....	".....
J. C. McMullin.....	".....	".....

CHICAGO & CALUMET TERMINAL RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	D. S. Wegg.....	Chicago, Ill.....
First Vice-President.....	J. B. Williams.....	New York.....
Secretary and General Solicitor.....	H. S. Boutell.....	Chicago, Ill.....
Treasurer.....	G. S. Baxter.....	New York.....
Auditor.....	E. Sharsron.....	Chicago, Ill.....
General Auditor.....	J. A. Barker.....	New York.....
General Manager.....	S. R. Ansley.....	Chicago, Ill.....
Chief Engineer.....	J. W. Kendrick.....	".....
General Superintendent.....	G. Campbell.....	".....
Division Superintendent.....	E. R. Knowlton.....	".....
Traffic Manager.....	H. S. Hawley.....	".....
Superintendent of Telegraph.....	O. C. Green.....	St. Paul, Minn.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
D. S. Wegg.....	Chicago, Ill.....	May, 1893.....
J. B. Williams.....	New York.....	".....
H. S. Boutell.....	Chicago, Ill.....	".....
K. K. Knapp.....	".....	".....
H. S. Hawley.....	".....	".....

CHICAGO & EASTERN ILLINOIS RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	H. H. Porter.....	Chicago, Ill.....
President.....	M. J. Carpenter.....	".....
First Vice-President.....	O. S. Lyford.....	".....
Second Vice-President.....	C. W. Hillard.....	".....
Secretary.....	H. A. Rubidge.....	".....
Assistant Secretary.....	H. J. Messing.....	".....
Treasurer.....	C. W. Hillard.....	".....
Assistant Treasurer.....	A. R. Flower.....	New York.....
General Counsel.....	W. H. Lyford.....	Chicago, Ill.....
General Attorney.....	W. J. Calhoun.....	".....
Auditor.....	H. A. Rubidge.....	".....
Chief Engineer.....	H. F. Baldwin.....	".....
General Superintendent.....	Chas. H. Rockwell.....	".....
Superintendent.....	R. G. Mathews.....	Danville, Ill.....
Traffic Manager.....	G. J. Grammer.....	Chicago, Ill.....
General Freight Agent.....	L. R. Brockenrough.....	".....
Assistant General Freight Agent.....	H. E. Felton.....	".....
General Passenger Agent.....	Chas. L. Stone.....	".....
General Ticket Agent.....	Chas. L. Stone.....	".....
General Baggage Agent.....	Chas. L. Stone.....	".....
Superintendent of Motive Power.....	W. H. Miller.....	Danville, Ill.....
Agent in Illinois for transfer of stock.....	H. A. Rubidge, Secretary.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. W. Hillard	Chicago, Ill.	June, 1893.
R. M. Hoe	New York	" "
J. G. English	Danville, Ill.	" "
Benjamin Brewster	New York	" "
H. H. Porter	Chicago, Ill.	" 1894.
M. J. Carpenter	"	" "
A. R. Flower	New York	" "
Henry Seibert	"	" "
H. H. Stevens	Boston, Mass.	" 1895.
Geo. H. Ball	"	" "
O. S. Lyford	Chicago, Ill.	" "

CHICAGO & WESTERN INDIANA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board	V. T. Malott	Chicago, Ill.
President and General Manager	B. Thomas	"
Secretary and Auditor	M. J. Clark	"
Treasurer	John E. Murphy	"
General Solicitor	Chas. M. Osborn	"
Chief Engineer and General Roadmaster	F. C. Doran	"
Master of Transportation	J. M. Warner	"
Agent in Illinois for transfer of stock	M. J. Clark, Secretary	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
O. S. Lyford	Chicago, Ill.	June 6, 1893.
W. J. Spicer	Detroit, Mich.	"
Chas. M. Hays	St. Louis, Mo.	"
E. B. Thomas	New York	"
Samuel Thomas	"	"
J. D. Springer	Chicago, Ill.	"

EVANSVILLE, TERRE HAUTE & CHICAGO RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	C. W. Hillard	Chicago, Ill.
Secretary	H. A. Rubidge	"
Assistant Secretary	W. J. Calhoun	"
Treasurer	C. W. Hillard	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Josephus Collett	Terre Haute, Ind.	*May, 1893
W. R. McKean .....	.....	.....
H. H. Porter	Chicago, Ill.	"
O. S. Lyford	"	"
C. W. Hillard	"	"
M. J. Carpenter	"	"
H. A. Rubidge	"	"
W. H. Lyford	"	"
W. J. Calhoun	"	"

* Last Wednesday.

CHICAGO & ERIE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	J. G. McCullough	New York
First Vice-President	E. B. Thomas	"
Second Vice-President	Geo. H. Vaillant	"
Secretary	J. A. Middleton	"
Treasurer	Edward White	"
Attorney	Otto Gresham	Chicago, Ill.
Auditor	Andrew Donaldson	New York
Assistant Auditor	E. P. Campbell	"
General Manager	A. M. Tucker	Cleveland, Ohio
Chief Engineer	C. W. Buehholz	New York
General Superintendent	J. C. Moorehead	Cleveland, Ohio
Superintendent Transportation	A. Mozier	"
Division Superintendent	C. C. Reynolds	Huntingdon, Ind. ..
Division Superintendent	G. A. Coe	Chicago, Ill.
Superintendent of Telegraph	W. J. Holmes	New York
Traffic Manager	Geo. G. Cochrane	Chicago, Ill.
Assistant General Freight Agent	C. L. Thomas	"
General Passenger Agent	D. I. Roberts	New York
Assistant General Passenger Agent	F. W. Buskirk	Chicago, Ill.
General Baggage Agent	C. M. Clough	New York
Land Commissioner	J. H. Dynes	Cleveland, Ohio ..

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. G. McCullough	New York	*Nov. 1, 1891
John King	"	"
E. B. Thomas	"	"
Geo. H. Vaillant	"	"
Andrew Donaldson	"	"
H. H. Brown	Cleveland, O.	"
J. C. Morse	Chicago, Ill.	"
Samuel Spencer	New York	"
Jas. H. Benedict	"	"
V. T. Malott	Chicago, Ill.	"
Andrew W. Kent	New York	"
Tohn Tod	Cleveland, Ohio ..	"
M. D. Woodford	Cincinnati, Ohio ..	"

* One year from Nov. 1, 1891, and until a successor is chosen.

CHICAGO & GRAND TRUNK RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	L. J. Seargeant.....	Montreal, Prov. Q.
President.....	L. J. Seargeant.....	"
Secretary and Asst. to President.....	Chas. Percy.....	"
Treasurer.....	James H. Muir.....	Detroit, Mich.....
Solicitor.....	E. W. Meddaugh.....	"
General Manager.....	W. J. Spicer.....	"
Chief Engineer.....	George Masson.....	"
Superintendent.....	A. B. Atwater.....	"
Asst. Superintendent.....	A. R. McIntyre.....	"
Mechanical Superintendent.....	Herbert Roberts.....	"
Traffic Manager.....	G. B. Reeve.....	Chicago, Ill.....
Asst. General Freight Agent.....	David Brown.....	"
General Passenger and Ticket Agent.....	W. E. Davis.....	"
General Baggage Agent.....	J. E. Quick.....	Detroit, Mich.....
General Storekeeper.....	J. S. Lorimer.....	"
Agent in Illinois for transfer of stock....	F. A. Howe.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.*
L. J. Seargeant.....	Montreal, Province of Quebec	12th April, 1893.....
E. W. Meddaugh.....	Detroit, Mich.....	"
W. J. Spicer.....	"	"
Henry Howard.....	Port Huron, Mich.....	"
W. C. Beardsley.....	Auburn, N. Y.....	"
F. A. Howe.....	Chicago, Ill.....	"
De F. Skinner.....	Valparaiso, Ind.....	"

* Or when their successors are appointed.

GRAND TRUNK JUNCTION RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	L. J. Seargeant.....	Montreal, Prov. Q.
President.....	L. J. Seargeant.....	"
Vice-President.....	F. A. Howe.....	Chicago, Ill.....
Secretary.....	Charles Percy.....	Montreal, Prov. Q.
Treasurer.....	Jas. H. Muir.....	Detroit, Mich.....
Solicitor.....	E. W. Meddaugh.....	"
General Manager.....	W. J. Spicer.....	"
Agent in Illinois for transfer of stock....	F. A. Howe.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
L. J. Seargeant	Montreal, Province of Quebec	12th April, 1893, or when their successors are appointed.
F. A. Howe	Chicago, Ill.	
E. W. Meddaugh	Detroit, Mich.	
W. J. Spicer	Chicago, Ill.	
Jno. McCaffrey	Chicago, Ill.	

CHICAGO & ILLINOIS SOUTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	John S. Hannah	Chicago, Ill.
First Vice-President	William P. Harvey	Baltimore, Md.
Secretay	George M. Patch	Chicago, Ill.
Treasurer	George S. McReynolds	Chicago, Ill.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
William P. Harvey	Baltimore, Md.	February, 1893.
John S. Hannah	Chicago, Ill.	" 1893.
George S. McReynolds	"	" 1893.
George M. Patch	"	" 1893.
T. C. Hannah	"	" 1895.

CHICAGO & INDIANA STATE LINE RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Nathaniel Thayer	Boston, Mass.
First Vice-President	John B. Sherman	Chicago, Ill.
Secretary and Treasurer	George T. Williams	"
Assistant Secretary and Treasurer	J. C. Denison	"
General Manager	John B. Sherman	"
General Superintendent	James H. Ashby	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John Newell	Chicago, Ill.	January, 1893.
John B. Sherman	"	" 1893.
Irus Coy	"	" 1894.
S. B. Roath	"	" 1894.
L. O. Goddard	"	" 1894.
Nathaniel Thayer	Boston, Mass.	" 1895.
George T. Williams	Chicago, Ill.	" 1895.

CHICAGO & NORTHWESTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Albert Keep.....	Chicago, Ill.....
President.....	Marvin Hughitt.....	Chicago, Ill.....
First Vice-President.....	M. L. Sykes.....	New York.....
Second Vice-President.....	M. M. Kirkman.....	Chicago, Ill.....
Third Vice-President.....	W. H. Newman.....	New York.....
Secretary.....	M. L. Sykes.....	New York.....
Treasurer.....	M. L. Sykes.....	New York.....
General Counsel.....	William C. Goudy.....	Chicago, Ill.....
Attorney.....	Clarence S. Darrow.....	Chicago, Ill.....
Auditor.....	J. B. Redfield.....	Chicago, Ill.....
General Manager.....	J. M. Whitman.....	Chicago, Ill.....
Chief Engineer.....	John E. Blunt.....	Chicago, Ill.....
General Superintendent.....	S. Sanborn.....	Chicago, Ill.....
Assistant General Superintendent.....	Peter Hallenbeck.....	Winona, Minn.....
Division Superintendent, in Illinois.....	William A. Gardner.....	Chicago, Ill.....
Division Superintendent, in Illinois.....	John C. Stuart.....	Chicago, Ill.....
Superintendent of Telegraph.....	Geo. H. Thayer.....	Chicago, Ill.....
General Freight Agent.....	Hiram R. McCullough.....	Chicago, Ill.....
General Passenger Agent.....	William A. Thrall.....	Chicago, Ill.....
General Ticket Agent.....	William A. Thrall.....	Chicago, Ill.....
General Baggage Agent.....	Nathaniel A. Phillips.....	Chicago, Ill.....
Land Commissioner.....	Charles E. Simmons.....	Chicago, Ill.....
Agent in Illinois for transfer of stock.....	J. B. Redfield, Ass't Sec'y.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
W. L. Scott.....	Erie, Pa.....	June, 1893.....
Percy R. Pyne.....	New York.....	June, 1893.....
F. W. Vanderbilt.....	New York.....	June, 1893.....
W. K. Vanderbilt.....	New York.....	June, 1893.....
H. McK. Twombly.....	New York.....	June, 1893.....
John I. Blair.....	Blairtown, N. J.....	June, 1893.....
James C. Fargo.....	New York.....	June, 1894.....
David P. Kimball.....	Boston, Mass.....	June, 1894.....
Chauncey M. Depew.....	New York.....	June, 1894.....
Samuel F. Barger.....	New York.....	June, 1894.....
Albert Keep.....	Chicago, Ill.....	June, 1894.....
M. L. Sykes.....	New York.....	June, 1894.....
Horace Williams.....	New York.....	June, 1894.....
Frederick L. Ames.....	Clinton, Iowa.....	June, 1895.....
John M. Burke.....	Boston, Mass.....	June, 1895.....
Marvin Hughitt.....	New York.....	June, 1895.....
N. K. Fairbank.....	Chicago, Ill.....	June, 1895.....

CHICAGO & NORTHERN PACIFIC RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	David S. Wegg.....	Chicago, Ill.....
First Vice-President.....	James B. Williams.....	New York.....
Second Vice-President.....	J. L. High.....	Chicago, Ill.....
Secretary.....	Henry S. Boutell.....	Chicago, Ill.....
Treasurer.....	Geo. S. Baxter.....	New York.....
Attorney.....	K. K. Knapp.....	Chicago, Ill.....
General Solicitor.....	Henry S. Boutell.....	Chicago, Ill.....
General Auditor.....	J. A. Barker.....	New York.....
Auditor.....	E. Shearson.....	Chicago, Ill.....
General Manager.....	Samuel R. Ainslie.....	New York.....
Chief Engineer.....	J. W. Kendrick.....	Chicago, Ill.....
General Superintendent.....	G. Campbell.....	Chicago, Ill.....
Division Superintendent.....	E. R. Knowlton.....	Chicago, Ill.....
Superintendent of Telegraph.....	O. C. Green.....	St. Paul, Minn.....
Traffic Manager.....	H. S. Hawley.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
James B. Williams.....	New York.....	1st Wed., Mar., 1893
David S. Wegg.....	Chicago, Ill.....	" " 1894
H. S. Hawley.....	" ".....	" " 1894
J. L. High.....	" ".....	" " 1894
H. S. Boutell.....	Chicago, Ill.....	" " 1895
K. K. Knapp.....	" ".....	" " 1895

CHICAGO & OHIO RIVER RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	J. Collett.....	Terre Haute, Ind..
Secretary and Treasurer.....	W. J. Lewis.....	Evansville, Ind....
Auditor.....	E. B. Cooke.....	" ".....
General Manager.....	E. O. Hopkins.....	" ".....
Superintendent of Telegraph.....	C. E. Achuff.....	Olney, Ill.....
General Freight Agent.....	E. O. Hopkins.....	Evansville, Ind....
General Passenger Agent.....	R. A. Campbell.....	" ".....
Assistant General Passenger Agent.....	S. D. McLeish.....	" ".....
General Ticket Agent.....	R. A. Campbell.....	" ".....
Assistant General Ticket Agent.....	S. D. McLeish.....	" ".....
General Baggage Agent.....	F. R. Wheeler.....	" ".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. Collett.....	Terre Haute, Ind.....	May 7, 1892.....
E. O. Hopkins	Evansville, Ind.....	"
B. G. Hudnut	Terre Haute, Ind.....	"
Bluford Wilson.....	Springfield, Ill.....	"
R. B. Starbuck.....	Mattoon, Ill.....	"
F. W. Cook.....	Evansville, Ind.....	"
E. P. Huston.....	"	"
David Littler	Springfield, Ill.....	"
A. N. Parlin	Boston, Mass.....	"
Austin Corbin.....	New York.....	"
N. K. Fairbanks.....	Chicago, Ill.....	"
J. L. Hamer.....	Brooklyn, N. Y.....	"
E. S. Wilson.....	Springfield, Ill.....	"

CHICAGO, BURLINGTON & NORTHERN RAILROAD
COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	J. M. Forbes.....	Boston, Mass.....
President.....	Geo. B. Harris	Chicago, Ill.....
Secretary	W. J. Ladd.....	Boston, Mass.....
Treasurer.....	J. C. Peasley	Chicago, Ill.....
Attorney.....	J. W. Losey	LaCrosse, Wis.....
Auditor.....	N. B. Hinekey	St. Paul, Minn.....
Engineer.....	S. D. Purdy.....	LaCrosse, Wis.....
General Superintendent.....	J. R. Hastings.....	St. Paul, Minn.....
Assistant Superintendent.....	D. Cunningham.....	LaCrosse, Wis.....
Assistant Superintendent.....	J. C. Howard.....	Minneapolis, Minn.....
Superintendent of Telegraph.....	F. C. Beisel.....	LaCrosse, Wis.....
General Freight Agent.....	W. J. C. Kenyon.....	St. Paul, Minn.....
General Passenger Agent.....	W. J. C. Kenyon.....	"
General Baggage Agent.....	E. A. Sadd.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. J. Paine	Boston, Mass.....	2d Wed., June, 1893.
J. Murray Forbes.....	"	"
J. L. Gardner	"	"
F. W. Hunnewell	"	"
Richard Olney.....	"	"
C. E. Perkin.....	Burlington, Ia.....	"
Geo. B. Harris.....	Chicago, Ill.....	"

CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	J. M. Forbes.....	Boston, Mass.....
President.....	C. E. Perkins.....	Burlington, Iowa..
First Vice-President.....	J. C. Peasley.....	Chicago, Ill.....
Second Vice-President.....	G. B. Harris.....	Chicago, Ill.....
Secretary.....	T. S. Howland.....	Boston, Mass.....
Treasurer.....	J. C. Peasley.....	Chicago, Ill.....
General Solicitor.....	J. W. Blythe.....	Burlington, Iowa..
Attorney at Chicago.....	C. M. Dawes.....	Chicago, Ill.....
Attorney at Galesburg.....	O. F. Price.....	Galesburg, Ill.....
Comptroller, acting.....	W. J. Ladd.....	Boston, Mass.....
Auditor General.....	Jno. L. Lathrop.....	Chicago, Ill.....
Assistant General Auditor.....	C. I. Sturgis.....	".....
General Manager.....	W. F. Merrill.....	".....
Chief Engineer.....	E. J. Blake.....	".....
General Superintendent.....	J. D. Besler.....	".....
Illinois Lines Superintendent.....	F. C. Rice.....	Galesburg, Ill.....
Division Superintendent.....	H. D. Judson.....	Aurora, Ill.....
Division Superintendent.....	Jno. Lass.....	Galesburg, Ill.....
Division Superintendent.....	W. B. Throop.....	Beardstown, Ill....
Sup't Freight Terminals at Chicago.....	F. A. Delano.....	Chicago, Ill.....
General Freight Agent.....	Thomas Miller.....	".....
Assistant General Freight Agents.....	{ W. B. Hamblin.....	".....
	{ F. Rogers.....	".....
	{ E. R. Puffer.....	".....
General Passenger and Ticket Agent....	P. S. Eustis.....	".....
Asst. Gen'l Passenger and Ticket Agt....	L. Wakeley.....	".....
General Baggage Agent.....	E. A. Sadd.....	".....
Land Commissioner.....	W. W. Baldwin.....	Burlington, Iowa..
Agent in Illinois for transfer of stock...	H. W. Weiss.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. M. Forbes.....	Boston, Mass.....	May 17, 1893.....
C. J. Paine.....	".....	".....
J. L. Gardner.....	".....	".....
Wm. Endicott, Jr.....	".....	".....
Richard Olney.....	".....	".....
F. W. Hunnewell.....	".....	".....
T. J. Coolidge.....	Manchester, Mass.....	".....
E. W. Hooper.....	Cambridge, Mass.....	".....
J. N. A. Griswold.....	New York.....	".....
Peter Geddes.....	".....	".....
C. E. Perkins.....	Burlington, Iowa.....	".....

CHICAGO & IOWA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	F. H. Head.....	Chicago, Ill.....
First Vice-President.....	J. C. Peasley.....	".....
Second Vice-President.....	G. B. Harris.....	".....
Secretary.....	L. O. Goddard.....	".....
Treasurer.....	J. C. Peasley.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
F. H. Head.....	Chicago, Ill.....	March, 1893.....
C. M. Higginson.....	".....	".....
L. O. Goddard.....	".....	".....
H. W. Weiss.....	".....	".....
C. I. Sturgis.....	".....	".....
J. C. Peasley.....	".....	".....
Jos. Reising.....	Aurora.....	".....

GALESBURG & RIO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	L. O. Goddard.....	Chicago, Ill.....
Secretary.....	H. W. Weiss.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. I. Sturgis.....	Chicago, Ill.....	1894.....
F. L. Bagg.....	".....	1893.....
D. B. Francis.....	St. Louis, Mo.....	1894.....
L. O. Goddard.....	Chicago, Ill.....	1894.....
J. B. Cotton.....	Galesburg, Ill.....	1894.....

ILLINOIS VALLEY & NORTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	L. O. Goddard.....	Chicago, Ill.....
Secretary and Treasurer.....	H. W. Weiss.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Geo. B. Harris.....	Chicago, Ill.....	Last Tuesday, June, 1893
C. I. Sturgis.....	".....	".....
L. O. Goddard.....	".....	".....
H. W. Weiss.....	".....	".....
J. C. Osgood.....	New York.....	".....

LIVERPOOL COAL RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Paul Morton.....	Chicago, Ill.....
Secretary.....	E. Phelps.....	.....
Treasurer.....	A. Traer.....	.....
Attorney.....	J. M. Dawes.....	.....
General Superintendent.....	T. J. Phillips.....	Dunfermline, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Paul Morton.....	Chicago, Ill.....	September 19, 1892.....
C. M. Dawes.....
C. M. Schenck.....
Lowell Copeland.....
C. E. Phelps.....

QUINCY, ALTON, & ST. LOUIS RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	L. O. Goddard.....	Chicago, Ill.....
Secretary and Treasurer.....	H. W. Weiss.....	.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. E. Perkins.....	Burlington, Iowa.....	April 19, 1893.....
T. S. Howland.....	Boston, Mass.....	.....
J. C. Peasley.....	Chicago, Ill.....	.....
C. I. Sturgis.....	.....	.....
L. O. Goddard.....	.....	.....
H. W. Weiss.....	.....	.....
W. J. Fabinan.....	.....	.....
C. M. Higginson.....	.....	.....
F. S. Bagg.....	.....	.....

ST. LOUIS, ROCK ISLAND & CHICAGO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	J. N. A. Griswold.....	New York.....
Vice-President.....	J. L. Lathrop.....	Chicago, Ill.....
Secretary and Treasurer.....	H. W. Weiss.....	.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. E. Perkins.....	Burlington, Iowa.....	April, 1893.....
H. W. Weiss.....	Chicago, Ill.....	.....
C. M. Dawes.....	.....	.....
J. L. Lathrop.....	.....	April, 1894.....
L. O. Goddard.....	.....	.....
J. N. A. Griswold.....	New York.....	April, 1895.....
J. C. Peasley.....	Chicago, Ill.....	.....

CHICAGO, MILWAUKEE & ST. PAUL RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Roswell Miller.....	Chicago, Ill.....
First Vice-President.....	Frank S. Bond.....	New York.....
Third Vice-President.....	E. P. Ripley.....	Chicago, Ill.....
Secretary.....	P. M. Myers.....	Milwaukee, Wis.....
Treasurer.....	F. G. Ranney.....	Chicago, Ill.....
Assistant Treasurer.....	John McNabb.....	.....
General Solicitor.....	John T. Fish.....	.....
General Counsel.....	John W. Cary.....	.....
Comptroller.....	E. Q. Sewall.....	.....
General Auditor.....	W. N. D. Winne.....	.....
General Manager.....	A. J. Earling.....	.....
Chief Engineer.....	D. J. Whittemore.....	.....
General Superintendent.....	W. G. Collins.....	.....
Assistant General Superintendents.....	Two in number.....	.....
Division Superintendents.....	Fifteen in number.....	.....
Superintendent of Telegraph.....	U. J. Fry.....	Milwaukee, Wis.....
Freight Traffic Manager.....	A. C. Bird.....	Chicago, Ill.....
General Freight Agent.....	J. H. Hiland.....	.....
Assistant General Freight Agents.....	Three in number.....	.....
General Passenger Agent.....	G. H. Heafford.....	.....
Assistant General Passenger Agents.....	Three in number.....	.....
General Ticket Agent.....	G. H. Heafford.....	.....
Assistant General Ticket Agents.....	Two in number.....	.....
General Baggage Agent.....	W. D. Carriek.....	Milwaukee, Wis.....
Land Commissioner.....	H. G. Hangan.....	.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Philip D. Armour	Chicago, Ill	September, 1892....
August Belmont	New York	"
Frank S. Bond	"	"
Chas. D. Dickey, Jr	"	"
Peter Geddes	"	"
Frederick Layton	Milwaukee, Wis	"
Joseph Milbank	New York	"
Roswell Miller	Chicago, Ill	"
William Rockefeller	New York	"
Samuel Spencer	"	"
A. Van Santvoord	"	"
J. Hood Wright	"	"

CHICAGO, PEORIA & ST. LOUIS RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	William S. Hook	Jacksonville, Ill....
First Vice-President	Isaac L. Morrison	"
Secretary and Treasurer	Marcus Hook	"
General Solicitor	I. L. Morrison	"
Auditor	Marcus Hook	"
General Superintendent	D. W. Rider	"
General Freight Agent	W. C. Alvord	"
Assistant General Freight Agent	C. A. Nixon	"
General Passenger Agent	W. W. Kent	"
Agent in Illinois for transfer of stock	Marcus Hook	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Isaac Morrison	Jacksonville, Ill	May 11th, 1893
Wm. I. Barber	Lafayette, Ind	" 1892
Wm. Hook	Jacksonville, Ill	" 1893
Marcus Hook	"	" 1892
Francis Hook	"	" 1892

ST. LOUIS & CHICAGO RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
General Manager	C. H. Bosworth	Springfield, Ill

CHICAGO, ROCK ISLAND & PACIFIC RAILWAY COMPANY

OFFICERS.

Title.	Name.	Location of Office.
President.....	R. R. Cable.....	Chicago, Ill.....
First Vice-President.....	Benj. Brewster.....	New York.....
Second Vice-President.....	W. G. Purdy.....	Chicago, Ill.....
Third Vice-President.....	H. A. Parker.....	".....
Secretary and Treasurer.....	W. G. Purdy.....	".....
General Counsel.....	Thos. F. Withrow.....	".....
General Attorney.....	Thos. S. Wright.....	".....
General Auditor.....	M. A. Low.....	Topeka, Kan.....
General Manager.....	F. W. Porter.....	Chicago, Ill.....
Assistant General Manager.....	E. St. John.....	".....
General Superintendent.....	W. I. Allen.....	".....
General Superintendent.....	H. F. Royce.....	".....
Division Superintendent.....	C. Dunlap.....	Topeka, Kan.....
Division Superintendent.....	C. L. Ewing.....	Chicago, Ill.....
Division Superintendent.....	A. J. Hitt.....	Horton, Kan.....
Division Superintendent.....	H. A. White.....	Trenton, Mo.....
Division Superintendent.....	C. N. Gilmore.....	Des Moines, Iowa.....
Division Superintendent.....	W. H. Stillwell.....	".....
Division Superintendent.....	S. B. Hovey.....	Herington, Kan.....
Division Superintendent.....	C. H. Hubbell.....	Colorado Springs, Col.....
Traffic Manager.....	W. M. Sage.....	Chicago, Ill.....
General Freight Agent.....	J. M. Johnson.....	".....
General Freight Agent.....	D. Atwood.....	Topeka, Kan.....
General Passenger Agent.....	John Sebastian.....	Chicago, Ill.....
Assistant General Passenger Agent.....	Geo. L. Rhodes.....	".....
General Ticket Agent.....	John Sebastian.....	".....
Asst. General Passenger and Ticket Agent.....	S. F. Boyd.....	".....
General Baggage Agent.....	J. D. Marston.....	".....
Superintendent of Telegraph.....	A. R. Swift.....	".....
Land Commissioner.....	J. L. Drew.....	Davenport, Iowa.....
Agent in Illinois for transfer of stock.....	W. G. Purdy.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
H. H. Porter.....	Chicago, Ill.....	June, 1895.....
Marshall Field.....	".....	".....
John DeKoven.....	".....	".....
David Dows, Jr.....	New York.....	".....
N. R. Bishoff.....	".....	1894.....
Alexander E. Orr.....	".....	".....
Alex. T. Van Nest.....	".....	".....
Hugh Riddle.....	Chicago, Ill.....	".....
R. R. Cable.....	Rock Island, Ill.....	".....
R. P. Flower.....	New York.....	1895.....
Benj. Brewster.....	".....	".....
Henry M. Flagler.....	".....	".....
Geo. G. Wright.....	Des Moines, Ia.....	".....

PEORIA & BUREAU VALLEY RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Geo. T. Boggs.....	New York.....
Secretary.....	J. F. Phillips.....	Chicago, Ill.....
Treasurer.....	Wm. A. Nash.....	New York.....
Agent in Illinois for transfer of stock.....	J. F. Phillips.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
David Dows, Jr.....	New York.....	June 8, 1893.....
Geo. T. Boggs	"	"
F. A. Platt.....	"	"
Wm. A. Nash.....	"	"
Richard M. Hoe	"	"
Jas. R. Cowing	"	"
J. F. Phillips.....	Chicago, Ill.....	"

CHICAGO, ST. PAUL & KANSAS CITY RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	A. B. Stickney	St. Paul, Minn.....
President.....	Jno. M. Egan.....	"
Vice-President and Transfer Agent.....	William L. Boyle	New York
Vice-President.....	C. W. Benson	St. Paul, Minn.....
Secretary	M. C. Woodruff	Dubuque, Iowa
Treasurer.....	W. B. Bend.....	St. Paul, Minn.....
General Counsel	Lusk, Bunn & Hadley...	"
Auditor	M. C. Heallion	"
General Manager	John M. Egan.....	"
Chief Engineer.....	H. Fernstrom.....	"
Division Superintendent.....	J. A. Kelly.....	Kansas City, Mo.....
Division Superintendent.....	B. F. Egan.....	Dubuque, Iowa.....
Division Superintendent.....	D. McNab	Chicago, Ill.....
Division Superintendent.....	J. Berlingett	Des Moines, Iowa
Superintendent of Telegraph	J. C. Ford	St. Paul, Minn.....
Traffic Manager.....	W. R. Busenbark	Chicago, Ill.....
General Freight Agent.....	P. C. Stohr	"
Assistant General Freight Agent	F. H. Tibbitts	"
General Passenger Agent.....	F. H. Lord.....	"
Assistant General Passenger Agent.....	C. A. Cairns	"
General Ticket Agent.....	F. H. Lord.....	"
Assistant General Ticket Agent.....	C. A. Cairns.....	"
General Baggage Agent.....	Jno. Colley	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
A. B. Stickney.....	St. Paul, Minn.....	September 1, 1892.....
Wm. Lewis Boyle.....	New York	"
Ansel Oppenheim.....	St. Paul, Minn.....	"
Wm. Dawson	"	"
C. W. Benson.....	"	"
S. C. Stickney	"	"
Jno. M. Egan.....	"	"
M. Anerbach	"	"
J. W. Lusk.....	"	"
A. Kahan	"	"
A. M. Drake	"	"
J. L. Pratt.....	Sycamore, Ill	"
David Rankin	Ta kio, Mo	"
A. Slimmer	Waverly, Iowa.....	"
F. D. Stout.....	Dubuque, Iowa.....	"

CHICAGO UNION TRANSFER RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	H. H. Porter.....	Chicago, Ill.....
Secretary.....	Park E. Simmons.....	".....
Treasury.....	Andrew Crawford.....	".....
Chief Engineer.....	W. S. Jones.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Samuel W. Allerton.....	Chicago, Ill.....	October, 1892.....
H. H. Porter.....	".....	".....
N. B. Ream.....	".....	".....
J. M. Whitman.....	".....	".....
Geo. B. Harris.....	".....	".....
A. B. Stickney.....	St. Paul, Minn.....	".....
Andrew Crawford.....	Chicago, Ill.....	".....
Roswell Miller.....	".....	".....
James M. Crea.....	Pittsburgh, Pa.....	".....
Edward J. Martyn.....	Chicago, Ill.....	".....
A. A. Sprague.....	".....	".....

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Cornelius Vanderbilt.....	New York.....
President.....	M. E. Ingalls.....	Cincinnati, O.....
Vice-President.....	J. D. Layng.....	New York.....
Secretary.....	E. F. Osborn.....	Cincinnati, O.....
Treasurer.....	F. D. Comstock.....	".....
General Counsel.....	J. T. Dye.....	".....
General Attorney.....	H. H. Poppleton.....	Cleveland, O.....
Auditor.....	P. A. Hewitt.....	Cincinnati, O.....
General Manager.....	J. Ramsey, Jr.....	Indianapolis, Ind.....
Chief Engineer.....	G. W. Kittridge.....	".....
General Superintendent.....	E. A. Peck.....	Cleveland, O.....
Division Superintendent.....	T. J. Higgins.....	Indianapolis, Ind.....
Division Superintendent.....	T. Reynolds.....	".....
Division Superintendent.....	G. W. Bender.....	".....
Division Superintendent.....	A. G. Wells.....	Springfield, O.....
Division Superintendent.....	Wm. Gibson.....	Mt. Carmel, Ill.....
Division Superintendent.....	J. W. Simmons.....	Sandusky, O.....
Division Superintendent.....	S. T. Blizard.....	Connersville, Ind.....
Division Superintendent.....	B. S. Sutton.....	Indianapolis, Ind.....
Superintendent of Telegraph.....	C. S. Rhoads.....	Cincinnati, O.....
Superintendent of Motive Power.....	E. P. Lord.....	".....
Traffic Manager.....	O. G. Murray.....	".....
General Freight Agent.....	A. S. White.....	".....
Assistant General Freight Agent.....	C. V. Lewis.....	".....
General Passenger Agent.....	D. B. Martin.....	".....
General Baggage Agent.....	D. W. Calkins.....	Cleveland, O.....
Purchasing Agent.....	J. H. Garaghty.....	Indianapolis, Ind.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Cornelius Vanderbilt	New York	October, 1894.....
W. K. Vanderbilt	"	" 1894.....
C. M. Depew	"	" 1894.....
H. McK. Twombly.....	"	" 1893.....
George Bliss	"	" 1893.....
J. Pierpont Morgan.....	"	" 1894.....
Jas. D. Laying	"	" 1893.....
Amos Townsend.....	Cleveland, O.....	" 1892.....
Jas. Barnett.....	"	" 1892.....
Benj. S. Brown.....	Columbus, O.....	" 1892.....
S. J. Broadwell.....	Cincinnati, O.....	" 1893.....
Alex. McDonald.....	"	" 1892.....
W. P. Anderson.....	"	" 1893.....
M. E. Ingalls.....	"	" 1894.....
Geo. A. Farlow.....	Boston, Mass.....	" 1892.....

KANKAKEE & SENECA RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	T. P. Bonfield.....	Kankakee, Ill.....
Secretary.....	E. F. Osborne.....	Cincinnati, O.....
Treasurer.....	F. D. Comstock.....	"
Auditor	P. A. Hewitt.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
M. E. Ingalls.....	Cincinnati, O.....	October, 1893.....
E. F. Osborn.....	"	" 1894.....
T. P. Bonfield	Kankakee, Ill.....	" 1894.....
R. R. Cable.....	Chicago, Ill.....	" 1892.....
W. G. Purdy.....	"	" 1892.....

PEORIA & EASTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	M. E. Ingalls.....	Cincinnati, O.....
Secretary	J. C. Davis.....	"
Auditor	P. A. Hewitt.....	"
General Manager.....	J. A. Barnard.....	Indianapolis, Ind.....
Division Superintendent.....	J. W. Riley*.....	"
Traffic Manager	Oscar G. Murray.....	Cincinnati, O.....
Assistant General Freight Agent.....	Ford Woods*.....	Indianapolis, Ind.....

Three officials noted* are only distinctive P. & E. officials; all others are officers of the C., C., C. & St. L. Ry.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
M. E. Ingalls	Cincinnati, O.	February, 1893
Jno. A. Glover	Urbana, Ill.	"
Jno. C. Tucker	Chicago, Ill.	"
E. F. Osborn	Cincinnati, O.	"
T. P. Bonfield	Kankakee, Ill.	"

DE PUE, LADD & EASTERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Albert L. Sweet	Chicago, Ill.
First Vice-President	W. S. Cherry	"
Secretary and Treasurer	Thos. A. Lemmon	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Albert L. Sweet	Chicago, Ill.	June 30, 1893
George S. House	Joliet, Ill.	"
Thos. A. Lemmon	Chicago, Ill.	"
T. B. Corey	Seattle, Wash.	"
W. S. Cherry	Colorado Springs, Col. ...	"

EAST ST. LOUIS & CARONDELET RAILWAY.

OFFICERS.

Title.	Name.	Location of Office.
President	Thos. D. Messler	Pittsburgh, Pa.
Secretary	S. B. Liggett	"
Treasurer	T. H. B. McKnight	"
General Superintendent	Jos. Hill	St. Louis, Mo.
Assistant Superintendent	Geo. K. Thomas	East St. Louis, Ill.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. S. Peers.....	Collinsville, Ill.....	February 16, 1893.....
C. H. Seybt.....	Highland, Ill.....	" "
C. D. Hoiles.....	Greenville, Ill.....	" "
Abram McNeil.....	" "	" "
Henry D. Sexton.....	East St. Louis, Ill.....	" "
W. R. McKeen.....	Terre Haute, Ind.....	" "
James McCrea.....	Pittsburgh, Pa.....	" "
Thomas D. Messler.....	" "	" "
Edgar Reynolds.....	St. Louis, Mo.....	" "

EAST ST. LOUIS CONNECTING RAILWAY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	John Scullin.....	St. Louis, Mo.....
First Vice-President.....	A. C. Church.....	" "
Secretary.....	S. C. Church.....	" "
Treasurer.....	H. L. Clark.....	" "
Auditor.....	A. T. W. Pritchett.....	" "
Manager.....	C. H. Sharman.....	" "
Chief Engineer.....	S. W. Lee.....	" "
General Freight Agent.....	W. S. Hodges.....	" "
General Agent.....	R. N. Bothner.....	" "
Agent in Illinois for transfer of stock.....	S. C. Church.....	East St. Louis, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John Scullin.....	St. Louis, Mo.....	November 8, 1892.....
A. C. Church.....	" "	" "
Henry Sackman.....	East St. Louis, Ill.....	" "
John W. Turner.....	St. Louis, Mo.....	" "
Charles W. Thomas.....	Belleville, Ill.....	" "
Edward Wright.....	East St. Louis, Ill.....	" "
E. C. Newkirk.....	" "	" "

ELGIN, JOLIET & EASTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Samuel Spencer.....	New York.....
Vice-President.....	Norman Williams.....	Chicago, Ill.....
Secretary.....	F. D. Raymond.....	" "
Treasurer.....	F. D. Raymond.....	" "
General Solicitor.....	A. D. Wheeler.....	" "
Auditor.....	F. W. Sutton.....	" "
Superintendent.....	G. O. Clinton.....	Joliet, Ill.....
Chief Engineer.....	E. H. Lee.....	" "
Traffic Manager.....	H. J. Page.....	Chicago, Ill.....
Agent in Illinois for transfer of stock.....	F. D. Raymond.....	" "

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Samuel Spencer.....	New York.....	September, 1894.....
Norman Williams.....	Chicago, Ill.....	" " " ".....
J. Hood Wright.....	New York.....	" " " ".....
A. J. Forbes-Leith.....	" " " ".....	" " 1893.....
H. J. Page.....	Chicago, Ill.....	" " " ".....
F. W. Sutton.....	" " " ".....	" " " ".....
R. J. Cross.....	New York.....	" " " ".....
A. J. Caton.....	Chicago, Ill.....	" " 1892.....
A. D. Wheeler.....	" " " ".....	" " " ".....
C. S. Holt.....	" " " ".....	" " " ".....
C. H. Coster.....	New York.....	" " " ".....

FULTON COUNTY NARROW GAUGE RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	S. H. Mallory.....	Lewistown, Ill.....
First Vice-President.....	Henry Phelps.....	" " " ".....
Secretary.....	D. J. Thayer.....	Chariton, Iowa.....
Treasurer.....	F. R. Crocker.....	" " " ".....
Auditor.....	Jo. D. Temple.....	Lewistown, Ill.....
General Manager.....	S. H. Mallory.....	" " " ".....
Superintendent.....	A. C. Atherton.....	" " " ".....
General Freight Agent.....	A. C. Atherton.....	" " " ".....
General Passenger Agent.....	A. C. Atherton.....	" " " ".....
General Ticket Agent.....	A. C. Atherton.....	" " " ".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
T. M. Stuart.....	Chariton, Iowa.....	1892.....
D. J. Thayer.....	" " " ".....	" " " ".....
J. C. Worley.....	Lewistown, Ill.....	" " " ".....
A. Mallory.....	Creston, Iowa.....	1893.....
Jo. D. Temple.....	Lewistown, Ill.....	" " " ".....
Henry Phelps.....	" " " ".....	" " " ".....
Moses Turner.....	" " " ".....	1894.....
Joseph Braden.....	Chariton, Iowa.....	" " " ".....
S. H. Mallory.....	" " " ".....	" " " ".....
E. A. Temple.....	De Moines, Iowa.....	1895.....
A. C. Atherton.....	Lewiston, Ill.....	" " " ".....
J. A. Gray.....	" " " ".....	" " " ".....

GRAND TOWER & CAPE GIRARDEAU RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	E. A. Hitchcock.....	St. Louis, Mo.....
Vice-President.....	W. O. Garrison.....	St. Louis, Mo.....
Secretary.....	J. D. Peters.....	Murphysboro, Ill.....
Treasurer.....	O. L. Garrison.....	St. Louis, Mo.....
General Attorney.....	W. W. Barr.....	Carbondale, Ill.....
Auditor.....	J. P. Foster.....	St. Louis, Mo.....
Superintendent.....	F. H. Batcher.....	Murphysboro, Ill.....
General Freight Agent.....	Edward Brown.....	St. Louis, Mo.....
General Passenger Agent.....	Edward Brown.....	St. Louis, Mo.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. D. Peters.....	Murphysboro, Ill.....	March 28, 1893.....
E. A. Hitchcock.....	St. Louis, Mo.....	“ 1893.....
W. O. Garrison.....	St. Louis, Mo.....	“ 1893.....
W. W. Barr.....	Carbondale, Ill.....	“ 1894.....
B. B. Bromsley.....	Grand Tower, Ill.....	“ 1894.....

GRAND TOWER & CARBONDALE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	E. A. Hitchcock.....	St. Louis, Mo.....
Vice-President.....	O. L. Garrison.....	St. Louis, Mo.....
Secretary.....	J. D. Peters.....	Murphysboro, Ill.....
Treasurer.....	O. L. Garrison.....	St. Louis, Mo.....
Auditor.....	J. P. Foster.....	St. Louis, Mo.....
Superintendent.....	F. H. Batcher.....	Murphysboro, Ill.....
General Freight Agent.....	Edward Brown.....	St. Louis, Mo.....
General Passenger Agent.....	Edward Brown.....	St. Louis, Mo.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. D. Peters.....	Murphysboro, Ill.....	March 28, 1893.....
W. W. Barr.....	Carbondale, Ill.....	“ “.....
B. B. Bromsley.....	Grand Tower, Ill.....	“ “.....
E. A. Hitchcock.....	St. Louis, Mo.....	“ 1894.....
O. L. Garrison.....	St. Louis, Mo.....	“ “.....

ILLINOIS CENTRAL RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Second Vice-President.....	J. T. Harahan.....	".....
Assistant Second Vice-President.....	C. A. Beck.....	Chicago, Ill.....
Secretary.....	A. G. Hackstaff.....	New York.....
Treasurer.....	Henry D. Wolf.....	Chicago, Ill.....
Assistant Treasurer.....	E. T. H. Gibson.....	New York.....
General Counsel.....	B. F. Ayer.....	Chicago, Ill.....
General Solicitor.....	James Pentress.....	".....
Auditor of Passenger Receipts.....	A. D. Joslin.....	".....
Auditor of Freight Receipts.....	F. Fairman.....	".....
Auditor of Disbursements.....	I. Anderson.....	".....
General Superintendent.....	A. W. Sullivan.....	".....
Chief Engineer.....	J. F. Wallace.....	".....
Superintendent.....	J. G. Hartigan.....	".....
Division Superintendent.....	Horace Baker.....	".....
Division Superintendent.....	H. McCourt.....	Amboy, Ill.....
Division Superintendent.....	F. B. Harriman.....	Freeport, Ill.....
Division Superintendent.....	D. S. Bailey.....	Clinton, Ill.....
Superintendent of Machinery.....	H. Schlaeks.....	Chicago, Ill.....
Superintendent of Telegraph.....	C. S. Jones.....	".....
Traffic Manager.....	T. J. Hudson.....	".....
Assistant Traffic Manager.....	M. C. Markham.....	".....
General Freight Agent.....	W. E. Keepers.....	".....
Assistant General Freight Agent.....	W. R. Bascom.....	".....
General Passenger Agent.....	A. H. Hanson.....	".....
Assistant General Passenger Agent.....	J. T. Merry.....	Manchester, Ia.....
General Baggage Agent.....	H. A. Winter.....	Chicago, Ill.....
Superintendent of Transportation.....	E. G. Russell.....	".....
Land Commissioner.....	E. P. Skine.....	".....
Agent in Illinois for transfer of stock.....	John Dunn Asst. Sec'y..	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
His Excellency, Jos. W. Fifer, Governor of Illinois, ex officio.....	Springfield, Ill.....	January, 1893.....
Arthur Leary.....	New York.....	October, 1895.....
Chas. A. Peabody, Jr.....	".....	1892.....
S. Van Rensselaer Cruger.....	".....	".....
B. F. Ayer.....	Chicago, Ill.....	".....
Walther Luttgen.....	New York.....	1893.....
John W. Anchincloss.....	".....	".....
Oliver Harriman.....	".....	1894.....
John W. Doane.....	Chicago, Ill.....	1894.....
Chas. M. Beach.....	Hartford, Conn.....	".....
Stuyvesant Fish.....	Chicago, Ill.....	1895.....
Edward H. Harriman.....	New York.....	".....

BLUE ISLAND RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry Dewolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	July 19, 1893.....
J. C. Welling.....	".....	".....
B. F. Ayer.....	".....	".....
H. De Wolf.....	".....	".....
John Dunn.....	".....	".....

CHICAGO, HAVANA & WESTERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry De Wolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	October, 1892.....
E. H. Harriman.....	New York.....	".....
Henry De Wolf.....	Chicago, Ill.....	".....
B. F. Ayer.....	".....	" 1893.....
J. C. Welling.....	".....	".....

CHICAGO, MADISON & NORTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry De Wolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	October, 1892.....
B. F. Ayer.....	".....	".....
Henry De Wolf.....	".....	".....
J. C. Welling.....	".....	" 1893.....
J. T. Harahan.....	".....	".....

CHICAGO & SPRINGFIELD RAILROAD.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry De Wolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	October, 1892.....
J. C. Welling.....	".....	".....
B. F. Ayer.....	".....	" 1893.....
Henry De Wolf.....	".....	".....
J. T. Harahan.....	".....	".....

KANKAKEE & SOUTHWESTERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry De Wolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
E. H. Harriman.....	New York.....	October, 1892.....
J. C. Welling.....	Chicago, Ill.....	".....
Henry De Wolf.....	".....	".....
Stuyvesant Fish.....	".....	" 1893.....
B. F. Ayer.....	".....	".....

RANTOUL RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary.....	W. G. Bruen.....	".....
Treasurer.....	Henry DeWolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	October, 1892.....
E. H. Harriman.....	New York.....	" ".....
J. C. Welling.....	Chicago, Ill.....	" 1893.....
B. F. Ayer.....	".....	" ".....
Henry DeWolf.....	".....	" ".....

SOUTH CHICAGO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Stuyvesant Fish.....	Chicago, Ill.....
Vice-President.....	J. C. Welling.....	".....
Secretary	W. G. Bruen.....	".....
Treasurer.....	Henry DeWolf.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Stuyvesant Fish.....	Chicago, Ill.....	October, 1892.....
E. H. Harriman.....	New York.....	" ".....
J. C. Welling.....	Chicago, Ill.....	" ".....
B. F. Ayer.....	".....	" ".....
Henry DeWolf.....	".....	" ".....

INDIANA & ILLINOIS SOUTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Wm. H. Alley.....	Chicago, Ill.....
Vice-President.....	Jno. B. Lyon.....	".....
Secretary.....	P. H. Blue.....	Sullivan, Ind.....
Treasurer.....	M. B. Wilson.....	Indianapolis, Ind.....
General Solicitor.....	John S. Cooper.....	Chicago, Ill.....
Assistant General Solicitor.....	Jno. T. Hays.....	Sullivan, Ind.....
Auditor.....	C. R. Hinkle.....	".....
General Manager.....	P. H. Blue.....	".....
Consulting General Superintendent.....	A. B. Fitch.....	Terre Haute, Ind.....
General Freight and Passenger Agent.....	F. E. Basler.....	Sullivan, Ind.....
Train Master.....	W. R. Battenfield.....	".....
Road Master.....	G. E. Surralls.....	".....
Master Mechanic.....	M. E. Hotchkiss.....	Palestine, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Wm. H. Alley	Chicago, Ill.	June 1, 1892.....
P. H. Blue	Sullivan, Ind.	" 1893.....
M. B. Wilson.....	Indianapolis, Ind.....	" 1893.....
O. B. Harris	Sullivan, Ind.	" 1891.....
Jno. L. Stockton	Chicago, Ill.	" 1892.....
Jno. B. Lyon.....	"	" 1893.....
H. H. Gardner.....	"	" 1891.....
Jno. S. Cooper.....	"	" 1892.....
Henry F. Mills.....	"	" 1891.....

INDIANAPOLIS, DECATUR & WESTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Henry B. Hammond	New York
Secretary and Treasurer	Thos. B. Atkins.....	"
General Solicitor.....	R. B. F. Pierce	Indianapolis, Ind.....
Auditor	John V. McNeal.....	"
Superintendent	L. A. Boyd	"
General Passenger Agent.....	Jno. S. Lazarus	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John D. Probst.....	Englewood, N. J.	November, 1892.....
Hiram Hitchcock.....	New York.....	"
Henry B. Hammond.....	"	"
Horace L. Hotchkiss	"	"
Stephen H. Thayer	"	"
Chas. O. Allen.....	"	"
Thos. B. Atkins.....	"	"
John K. Warren.....	Decatur, Ill.....	"
E. F. Leonard.....	Peoria, Ill.....	"
John R. Elder.....	Indianapolis, Ind.....	"
R. B. F. Pierce.....	"	"

INDIANA, ILLINOIS & IOWA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	F. M. Drake.....	Centerville, Ia.....
Vice-President	Geo. H. Holt.....	New York
Secretary and Treasurer.....	John A. Drake.....	Chicago, Ill.....
Assistant Secretary.....	Chas. Martin.....	New York
General Solicitor.....	H. K. Wheeler	Kankakee, Ill.....
Auditor.....	M. J. Hartnett.....	"
General Manager.....	T. P. Shonts.....	Chicago, Ill.....
Engineer, maint. of way.....	Daniel Nowlan.....	Kankakee, Ill.....
Superintendent	C. H. Smith.....	"
Superintendent of Telegraph	C. H. Smith.....	"
General Freight and Passenger Agent...	C. W. Cook.....	Chicago, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
F. M. Drake	Centerville, Ia.	January, 1893
T. P. Shonts	Chicago, Ill.	"
J. A. Drake	"	"
C. H. Smith	Kankakee, Ill.	"
Geo. H. Holt	New York	"
J. W. Cochrane	"	"
H. M. Curtis	"	"

IOWA CENTRAL RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board	Russell Sage	New York
President	Russell Sage	"
First Vice-President	E. E. Chase	"
Secretary and Treasurer	Geo. R. Morse	"
Local Treasurer	Seth Zug	Marshalltown, Iowa
General Solicitor	A. C. Daly	"
Auditor	E. S. Benson	"
General Manager	C. H. Ackert	"
Chief Engineer	G. A. Pruden	"
Superintendent	J. H. Redmon	"
Superintendent of Telegraph	G. N. Fish	"
Traffic Manager	A. F. Banks	"
Assistant General Freight Agent	H. A. Hansgen	"
Assistant General Passenger Agent	T. P. Barry	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Russell Sage	New York	September 4, 1892
H. S. Morse	"	"
E. E. Chase	"	"
G. E. Taintor	"	"
G. R. Morse	"	"
C. H. Ackert	Marshalltown, Iowa	"
D. Smith	Chicago, Ill.	"
R. H. Sage	"	"

LAKE ERIE & WESTERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Calvin S. Brice	New York
President.....	Calvin S. Brice.....	"
Vice-President.....	L. M. Schwan.....	"
Secretary and Treasurer.....	L. M. Schwan.....	"
Assistant Treasurer.....	A. D. Thomas.....	Indianapolis, Ind.....
General Attorney.....	W. E. Hackedorn.....	"
Assistant General Attorney.....	F. S. Foote.....	"
Auditor.....	W. A. Wildhack.....	"
General Manager.....	Geo. L. Bradbury.....	"
Chief Engineer.....	F. H. Perry.....	"
General Superintendent.....	D. S. Hill.....	"
Division Superintendent.....	O. W. Bell.....	"
Division Superintendent.....	O. F. Grady.....	Lima, O.....
Traffic Manager.....	H. C. Parker.....	Indianapolis, Ind.....
Assistant General Freight Agent.....	S. B. Sweet.....	"
Assistant General Freight Agent.....	A. G. Young.....	"
General Passenger Agent.....	C. F. Daly.....	"
General Ticket Agent.....	C. F. Daly.....	"
General Baggage Agent.....	C. F. Daly.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Calvin S. Brice.....	New York.....	1st Wednesday, Oct., 1892
H. W. Cannon.....	"	"
George E. Stone.....	"	"
John B. Cohrs.....	Chicago, Ill.....	"
Samuel Thomas.....	New York.....	"
John G. Moore.....	"	"
George F. Baker.....	"	"
Edward Tuck.....	"	"
Nelson Robinson.....	"	"

LAKE SHORE & MICHIGAN SOUTHERN RAILWAY
COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	W. K. Vanderbilt.....	New York.....
President.....	Jno. Newell.....	Cleveland, O.....
Vice-President.....	Edwin D. Worcester.....	New York.....
Secretary and Treasurer.....	Edwin D. Worcester.....	"
Local Treasurer.....	Nicholas Bartlett.....	Cleveland, O.....
General Counsel.....	George C. Greene.....	"
Auditor.....	Cyrus P. Leland.....	"
General Manager.....	Jno. Newell.....	"
Assistant General Manager.....	P. P. Wright.....	"
Chief Engineer.....	E. A. Handy.....	"
General Superintendent.....	W. H. Canniff.....	"
Assistant General Superintendent.....	P. S. Blodgett.....	"
Division Superintendents, 8 in number.....	William Kline.....	Toledo, O.....
Superintendent of Telegraph.....	J. T. R. McKay.....	Cleveland, O.....
General Freight Agent.....	J. G. James.....	"
Assistant General Freight Agent.....	A. J. Smith.....	"
General Passenger Agent.....	E. C. Luce.....	"
Assistant General Passenger Agent.....	A. J. Smith.....	"
General Ticket Agent.....	E. C. Luce.....	"
Assistant General Ticket Agent.....	Jno. L. Freeman.....	"
General Baggage Agent.....	"	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Cornelius Vanderbilt	New York	May, 1893.
Darius O. Mills	"	"
James H. Reed	Pittsburgh, Pa.	"
Rasselas Brown	Warren, Pa.	"
William K. Vanderbilt	New York	May, 1894.
Samuel F. Barger	"	"
H. McK. Twombly	"	"
Charles M. Reed	Erie, Pa.	"
John Newell	Cleveland, O.	May, 1895.
Edwin D. Worcester	New York	"
John E. Burrill	"	"
Frederick W. Vanderbilt	"	"
John DeKoven	Chicago, Ill.	"

LOUISVILLE & NASHVILLE RAILROAD COMPANY
OPERATING SOUTHEAST & ST. LOUIS
RAILWAY.

OFFICERS.

Title.	Name.	Location of Office.
President	M. H. Smith	Louisville, Ky.
Secretary	J. H. Ellis	"
Treasurer	Wm. W. Thompson	"
Comptroller	C. Quarrier	"
General Manager	J. G. Metcalfe	"
General Superintendent	B. F. Dickson	Evansville, Ind.
Traffic Manager	Y. Vanden Berg	Louisville, Ky.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
M. H. Smith	Louisville, Ky.	November, 1892.
J. A. Lindsey	East St. Louis, Ill.	" 1892.
J. M. Hamill	Belleville, Ill.	" 1893.
G. C. Johnson	"	" 1893.
Lyttleton Cooke	Louisville, Ky.	" 1893.

LOUISVILLE, EVANSVILLE & ST. LOUIS CONSOLIDATED RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	D. J. Mackey	Evansville, Ind.....
Secretary and Treasurer.....	W. J. Lewis.....	"
General Counsel	Igelhart & Taylor	"
Auditor	E. B. Cooke.....	"
Superintendent of Telegraph.....	A. W. Beal.....	Huntingburg, Ind.....
Superintendent	Jas. Montgomery	"
General Traffic Manager	G. J. Grammer.....	Evansville, Ind.....
General Freight Agent	E. O. Hopkins	"
General Passenger Agent.....	R. A. Campbell.....	"
Assistant General Passenger Agent.....	S. D. McLeish	"
General Baggage Agent.....	F. R. Wheeler	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
D. J. Mackey	Evansville, Ind.....	October 15, 1892.....
W. J. Lewis	"	"
E. O. Hopkins	"	"
Bluford Wilson	Springfield, Ill.....	"
Thos. W. Scott.....	Fairfield, Ill.....	"
C. C. Baldwin	New York	"
Jas. Stillman	"	"
J. L. Lamson	"	"
Marcus Mayer	Baltimore, Md	"

MICHIGAN CENTRAL RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Cornelius Vanderbilt....	New York.....
President.....	Henry B. Ledyard.....	Detroit, Mich.....
Vice-President.....	Edwin D. Worcester.....	New York
Secretary.....	Edwin D. Worcester.....	"
Treasurer	Henry Pratt.....	"
General Counsel.....	Ashley Pond.....	Detroit, Mich.....
General Attorney.....	Henry Russell.....	"
Auditor	D. A. Waterman.....	"
Assistant Auditor.....	A. J. Burt.....	"
General Manager.....	Henry B. Ledyard.....	"
Chief Engineer.....	J. D. Hawks.....	"
General Superintendent.....	Robt. Miller.....	"
Assistant General Superintendent.....	R. H. S. Hommedieu.....	"
Division Superintendent.....	D. S. Sutherland.....	"
Division Superintendent.....	C. B. Bush.....	Jackson, Mich.....
Division Superintendent.....	W. J. Martin.....	Bay City, Mich.....
Division Superintendent.....	J. H. Snyder.....	Chicago, Ill.....
Division Superintendent.....	O. F. Jordan.....	St. Thomas, Ont.....
Superintendent of Telegraph	E. E. Torrey.....	Detroit, Mich.....
General Freight Agent.....	A. Mackay.....	Chicago, Ill.....
Assistant General Freight Agent.....	B. E. Hand.....	"
Assistant General Freight Agent.....	C. J. Hupp.....	Detroit, Mich.....
Assistant General Freight Agent.....	W. L. Benham.....	Bay City, Mich.....
Assistant General Freight Agent.....	John Crampton.....	Buffalo, N. Y.....
General Passenger and Ticket Agent.....	O. W. Ruggles.....	Chicago, Ill.....
Asst. Gen'l Passenger and Ticket Agent.....	G. E. King.....	"
General Baggage Agent.....	H. P. Dearing.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Cornelius Vanderbilt.....	New York.....	May, 1893.....
William K. Vanderbilt.....	New York.....	" ".....
Henry B. Ledyard.....	Detroit, Mich.....	" ".....
Edwin D. Worcester.....	New York.....	" ".....
Samuel Barger.....	" ".....	" ".....
Chauncey M. Depew.....	" ".....	" ".....
F. M. Vanderbilt.....	" ".....	" ".....
Ashley Pond.....	Detroit, Mich.....	" ".....
Frederick S. Winston.....	Chicago, Ill.....	" ".....

JOLIET & NORTHERN INDIANA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	C. Vanderbilt.....	New York.....
Vice-President.....	H. B. Ledyard.....	Detroit, Mich.....
Secretary.....	E. D. Worcester.....	New York.....
Treasurer.....	Henry Pratt.....	" ".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. Vanderbilt.....	New York.....	When succes'r is app't'd
W. K. Vanderbilt.....	New York.....	" ".....
H. B. Ledyard.....	Detroit, Mich.....	" ".....
E. D. Worcester.....	New York.....	" ".....
Samuel F. Barger.....	" ".....	" ".....
C. M. Depew.....	" ".....	" ".....
Ashley Pond.....	Detroit, Mich.....	" ".....

MOBILE & OHIO RAILROAD COMPANY OPERATING ST.
LOUIS & CAIRO RAILROAD.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Wm. Butler Duncan.....	New York.....
President.....	J. C. Clarke.....	Mobile, Ala.....
First Vice-President.....	J. H. Fay.....	New York.....
Secretary and Treasurer.....	Henry Ta'ron.....	Mobile, Ala.....
Assistant Secretary.....	A. Mackintosh.....	New York.....
General Solicitor.....	E. L. Russell.....	Mobile, Ala.....
General Auditor.....	R. V. Taylor.....	" ".....
General Manager.....	J. C. Clarke.....	" ".....
General Superintendent.....	D. McLaren.....	St. Louis, Mo.....
Division Superintendent.....	C. S. Clarke.....	Mobile, Ala.....
Division Superintendent.....	J. N. Seale.....	Jackson, Tenn.....
Division Superintendent.....	H. W. Clarke.....	Murphysboro, Ill.....
Superintendent of Telegraph.....	K. McKenzie.....	Jackson, Tenn.....
General Freight Agent.....	J. T. Poe.....	St. Louis, Mo.....
Acting General Passenger Agent.....	E. E. Posey.....	Mobile, Ala.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. R. Edwards.....	Litchfield, Ill.	Annual meeting, 1893....
S. C. Judd.....	Chicago, Ill.....	" " " " " "
F. A. Horsey.....	New York.....	" " " " " "
Gabriel Morton.....	" " " " " "	" " " " " "
T. M. Logan.....	Murphysboro, Ill.....	" " " " " "
Wm. Ritchie.....	Chicago, Ill.....	" " " " " "
F. Bross.....	Cairo, Ill.....	" " " " " "
Chas. Hamilton.....	St. Louis, Mo.....	" " " " " "
J. A. Horsey.....	New York.....	" " " " " "

THE NEW YORK, CHICAGO & ST. LOUIS RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board	Wm. K. Vanderbilt.....	New York.....
President.....	D. W. Caldwell.....	Cleveland, Ohio.....
Secretary and Treasurer	Allyn Cox.....	New York.....
Assistant Treasurer	H. Hammersley.....	Cleveland, Ohio.....
General Counsel	Sam'l E. Williamson.....	" " " " " "
Auditor.....	James F. Curry.....	" " " " " "
General Superintendent.....	Lewis Williams.....	" " " " " "
Division Superintendent.....	A. W. Johnson.....	" " " " " "
Division Superintendent.....	C. D. Gorham.....	Ft. Wayne, Ind.....
Superintendent of Motive Power.....	Jno. Mackenzie.....	Cleveland, Ohio.....
Superintendent of Telegraph.....	J. S. Evans.....	" " " " " "
General Freight Agent.....	G. B. Spriggs.....	" " " " " "
General Passenger Agent.....	B. F. Horner.....	" " " " " "
Purchasing Agent.....	M. M. Rodgers.....	" " " " " "
Car Accountant.....	W. J. Robertson.....	" " " " " "
Transfer Agent.....	F. Middlebrook.....	New York.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Wm. K. Vanderbilt.....	New York.....	May, 1893.....
Cornelius Vanderbilt.....	" " " " " "	" " " " " "
Fred. W. Vanderbilt.....	" " " " " "	" " " " " "
H. McK. Twombly.....	" " " " " "	" " " " " "
Jno. S. Kennedy.....	" " " " " "	" " " " " "
James A. Roosevelt.....	" " " " " "	" " " " " "
Fred. P. Oleott.....	" " " " " "	" " " " " "
Chauncey M. Depew.....	" " " " " "	" " " " " "
Allyn Cox.....	" " " " " "	" " " " " "
D. W. Caldwell.....	Cleveland, Ohio.....	" " " " " "
Sam'l E. Williamson.....	" " " " " "	" " " " " "
Ralph W. Hickox.....	" " " " " "	" " " " " "
Chas. M. Reed.....	Erie, Pa.....	" " " " " "

THE CHICAGO & STATE LINE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Jno. Newell	Cleveland, Ohio.....
First Vice-President.....	James A. Roosevelt	New York
Secretary	James P. Curry.....	Cleveland, Ohio.....
Treasurer.....	H. Hammersley	"
Auditor.....	James P. Curry.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Fred P. Olcott	New York	January, 1895.....
Wm. K. Vanderbilt	"	1893.....
James A. Roosevelt.....	"	1893.....
John S. Kennedy.....	"	1891.....
John Newell.....	Chicago, Ill.....	"
A. G. Amsden.....	"	1895.....
J. L. Lockwood.....	"	1894.....
N. A. Skinner.....	"	1895.....
Pliny B. Smith.....	"	" 1891.....
		1893.....

NORTHERN PACIFIC RAILROAD COMPANY.

(Lessee Wisconsin Central Lines.)

OFFICERS.

Title.	Name.	Location of Office.
Treasurer.....	Geo. S. Baxter.....	New York
Assistant Treasurer	C. A. Clark.....	St. Paul, Minn.....
General Solicitor.....	David S. Wigg	Chicago, Ill.....
General Auditor.....	J. A. Barker.....	New York
Auditor	M. P. Martin.....	St. Paul, Minn.....
General Manager	S. R. Ainslie.....	Chicago, Ill.....
Chief Engineer.....	J. W. Kendrick.....	"
Division Superintendent.....	C. A. Lamoreux.....	St. Paul, Minn.....
Division Superintendent.....	A. R. Horn.....	Steven's Point, Wis.....
Division Superintendent.....	F. H. Marsh.....	Waukesha, Wis.....
Superintendent of Telegraph	O. C. Greene.....	St. Paul, Minn.....
General Traffic Manager.....	J. M. Hannaford.....	"
Traffic Manager.....	H. C. Barlow.....	Chicago, Ill.....
General Freight Agent	Jas. B. Cavanaugh.....	"
Assistant General Freight Agent.....	John C. McKinnon.....	"
General Pass., Ticket and Baggage Agt.....	James C. Pond.....	"

CHICAGO & WISCONSIN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President and Treasurer.....	Edwin H. Abbott.....	Cambridge, Mass.....
Secretary and General Solicitor.....	Howard Morris.....	Wilwaukee, Wis.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Edwin H. Abbott.....	Cambridge, Mass.....	Annual election.....
Howard Morris.....	Milwaukee, Wis.....	".....
Henry S. Hawley.....	Chicago, Ill.....	".....
Thos. H. Gill.....	".....	".....
K. K. Knapp.....	".....	".....

OHIO & MISSISSIPPI RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	J. F. Barnard.....	Cincinnati, Ohio.....
Secretary.....	Edw. P. Cutter.....	".....
Treasurer.....	Robert Reid.....	".....
General Solicitors.....	Ramsey, Maxwell & Ramsey.....	".....
Auditor.....	Edw. P. Cutter.....	".....
General Manager.....	J. F. Barnard.....	".....
Assistant to the General Manager.....	John Wells.....	".....
Chief Engineer.....	C. C. Chandler.....	".....
Superintendent.....	C. C. F. Bent.....	".....
Assistant Superintendent.....	C. M. Stanton.....	Springfield, Ill.....
Superintendent of Telegraph.....	A. Hayward.....	Cincinnati, Ohio.....
General Freight Agent.....	Wm. Duncan.....	St. Louis, Mo.....
General Passenger and Ticket Agent.....	W. B. Shattuck.....	Cincinnati, Ohio.....
Assistant General Ticket Agent.....	W. I. Robinson.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
F. W. Tracy.....	Springfield, Ill.....	October, 1892.....
Geo. S. Morrison.....	Chicago, Ill.....	".....
F. P. Dimpfel.....	New York.....	".....
A. Gracie King.....	".....	1893.....
Geo. C. Magoun.....	".....	".....
Edw. R. Bacon.....	".....	".....
B. S. Cunningham.....	Cincinnati, O.....	".....
J. F. Barnard.....	".....	1894.....
William Sibley.....	New York.....	".....
Geo. F. Crane.....	".....	".....
Derick Fahnestock.....	Baltimore, Md.....	1895.....
J. S. McKim.....	".....	".....
Julius S. Walsh.....	St. Louis, Mo.....	".....

PAWNEE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	John White.....	Pawnee, Ill.....
Vice-President.....	Hiram White.....	".....
Secretary.....	C. E. Clayton.....	".....
Treasurer.....	H. R. Davis.....	".....
General Counsel.....	Conkling & Grout.....	Springfield, Ill.....
Auditor.....	C. E. Clayton.....	Pawnee, Ill.....
General Freight Agent.....	H. E. Farnam.....	".....
General Passenger Agent.....	H. E. Farnam.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John White.....	Pawnee, Ill.....	July, 1893.....
H. R. Davis.....	".....	".....
Hiram White.....	".....	".....
C. White.....	Taylorville, Ill.....	" 1894.....
C. E. Clayton.....	Pawnee, Ill.....	".....
L. K. Davis.....	Springfield, Ill.....	".....

PENNSYLVANIA COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Geo. B. Roberts.....	Philadelphia, Pa.....
First Vice-President.....	James McCrea.....	Pittsburgh, Pa.....
Second Vice-President.....	J. T. Brooks.....	".....
Third Vice-President.....	Thomas D. Messler.....	".....
Fourth Vice-President.....	John E. Davidson.....	".....
Secretary.....	S. B. Liggett.....	".....
Treasurer.....	T. H. B. McKnight.....	".....
General Counsel.....	J. T. Brooks.....	".....
Assistant General Counsel.....	J. J. Brooks.....	".....
Comptroller.....	John W. Renner.....	".....
Assistant Comptroller.....	Albert McElvey.....	".....
Auditor Freight Receipts.....	John M. Lyon.....	".....
Auditor Passenger Receipts.....	J. P. Farley.....	".....
Auditor Disbursements.....	James Instan.....	".....
General Manager.....	Joseph Wood.....	".....
Chief Engineer.....	Thos. Rodd.....	".....
Gen'l Superintendent of Transportation.....	E. B. Taylor.....	".....
General Superintendent.....	Chas. Watts.....	".....
Division Superintendent.....	C. D. Law.....	Ft. Wayne, Ind.....
Purchasing Agent.....	Wm. Mullins.....	Pittsburgh, Pa.....
Superintendent of Telegraph.....	A. M. Schoyer.....	".....
Superintendent of Motive Power.....	F. S. Casanave.....	Ft. Wayne, Ind.....
General Freight Agent.....	Wm. Stewart.....	Pittsburgh, Pa.....
Assistant General Freight Agent.....	C. L. Cole.....	".....
General Passenger and Ticket Agent.....	E. A. Ford.....	".....
Chief Assistant General Passenger Agent.....	Frank VanDusen.....	".....
General Baggage Agent.....	R. R. Bentley.....	".....

CALUMET RIVER RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Thos. D. Messler	Pittsburgh, Pa.
Secretary	S. B. Liggett.....	"
Treasurer.....	T. H. B. McKnight.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Geo. M. Bogue	Chicago, Ill.	April 13, 1893.....
F. W. Belz	"	"
Wm. Borner	"	"
Thos. D. Messler	Pittsburgh, Pa.	"
Jas. McCrea	"	"

PITTSBURGH FT. WAYNE & CHICAGO RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.	Charles Lanier	New York
Secretary and Treasurer.....	John J. Haley.....	Pittsburgh, Pa

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
John S. Kennedy.....	New York	Annual election, 1893....
Chas. Lanier.....	"	"
Henry Amy.....	"	"
W. C. Egleson	"	"
G. B. Roberts.....	Philidelphia, Pa.	"
J. N. Hutchinson.....	"	"
James McCrea.....	Pittsburgh, Pa.	"
C. E. Speer	"	"
John Sherman.....	Mansfield, Ohio	"
L. B. Harrison.....	Cincinnati, Ohio	"
William Hooper.....	"	"
E. P. Williams.....	Ft. Wayne, Ind.	"
Levi Z. Leiter	Chicago, Ill.	"

SOUTH CHICAGO & SOUTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Thos. D. Messler	Pittsburgh, Pa.....
Secretary.....	S. B. Liggett	"
Treasurer.....	T. H. B. McKnight.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Thos. D. Messler	Pittsburgh, Pa.....	April, 1894.....
Jno. I. Bennett	Chicago, Ill	"
W. W. Chandler	"	"
Fred. W. Belz	"	1895.....
William Borner	"	"
Geo. Willard.....	"	1893.....
C. D. Law	Ft. Wayne, Ind.....	"

PEORIA & PEKIN UNION RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	Jos. Ramsey, Jr	Cincinnati, O.....
Vice-President.....	Jas. F. How	St. Louis, Mo
Secretary and Treasurer	H. K. Pinkney	Peoria, Ill.....
General Counsel	Stevens & Horton.....	"
Auditor	T. T. Dwight	"
Chief Engineer	Jas. E. Palmer.....	"
General Superintendent.....	C. E. Schaff.....	"
Superintendent of Telegraph	E. M. Flood	"
General Freight Agent.....	T. T. Dwight	"
General Passenger Agent.....	T. T. Dwight	"
Agent in Illinois for transfer of stock	H. K. Pinkney	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Joseph Ramsey, Jr.....	Cincinnati, O.....	1893.....
Wm. S. Hook.....	Jacksonville, Ill.....	“.....
Edgar T. Welles.....	New York.....	“.....
D. J. Mackey.....	Evansville, Ind.....	“.....
Wm. Green.....	Chicago, Ill.....	1895.....
Herman Clarke.....	New York.....	“.....
Jas. F. How.....	St. Louis, Mo.....	1894.....
Solon Humphreys.....	New York.....	“.....
J. A. Barnard.....	Indianapolis, Ind.....	“.....
Geo. W. Saul.....	Chicago, Ill.....	“.....
Wm. Elliott.....	Philadelphia, Pa.....	“.....
Marcus Hook.....	Jacksonville, Ill.....	1895.....
Chas. M. Hays.....	St. Louis, Mo.....	“.....

PEORIA, DECATUR & EVANSVILLE RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	D. J. Mackey.....	Evansville, Ind.....
Secretary and Treasurer.....	W. J. Lewis.....	“.....
General Counsel.....	Stevens & Horton.....	Peoria, Ill.....
Auditor.....	E. B. Cooke.....	Evansville, Ind.....
Chief Engineer.....	T. A. Aden.....	“.....
Superintendent.....	R. B. Starbuck.....	Mattoon, Ill.....
Superintendent of Telegraph.....	R. B. Starbuck.....	“.....
Traffic Manager.....	G. J. Grammer.....	Evansville, Ind.....
General Freight Agent.....	E. O. Hopkins.....	“.....
General Passenger Agent.....	R. A. Campbell.....	“.....
Assistant General Passenger Agent.....	S. D. McLeish.....	“.....
General Ticket Agent.....	R. A. Campbell.....	“.....
Assistant General Ticket Agent.....	S. D. McLeish.....	“.....
General Baggage Agent.....	F. R. Wheeler.....	“.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. M. DeVeau.....	New York.....	October, 1892.....
Herman Clark.....	“.....	1892.....
Arnold Kummer.....	Baltimore, Md.....	“ 1892.....
D. J. Mackey.....	Evansville, Ind.....	“ 1893.....
Wm. Heilman.....	“.....	“ 1893.....
C. C. Baldwin.....	New York.....	“ 1893.....
H. I. Nicholas.....	“.....	“ 1895.....
John L. Lamson.....	“.....	“ 1895.....
Wm. H. Goudby.....	“.....	“ 1895.....

PITTSBURGH, CINCINNATI, CHICAGO & ST. LOUIS RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Geo. B. Roberts.....	Philadelphia, Pa.....
First Vice-President.....	James McCrea.....	Pittsburgh, Pa.....
Second Vice-President.....	J. T. Brooks.....	".....
Third Vice-President.....	Thos. D. Messler.....	".....
Fourth Vice-President.....	John E. Davidson.....	".....
Secretary.....	S. B. Liggett.....	".....
Treasurer.....	T. H. B. McKnight.....	".....
Assistant Treasurer.....	M. C. Spencer.....	".....
General Counsel.....	J. T. Brooks.....	".....
Assistant General Counsel.....	J. J. Brooks.....	".....
Comptroller.....	Jno. W. Renner.....	".....
Assistant Comptroller.....	Albert McElvey.....	".....
Auditor, Freight Receipts.....	Jno. M. Lyon.....	".....
Auditor, Passenger Receipts.....	J. P. Farley.....	".....
Auditor, Disbursements.....	James Instan.....	".....
General Manager.....	Joseph Wood.....	".....
Gen'l Superintendent of Transportation.....	E. B. Taylor.....	".....
Chief Engineer.....	M. J. Becker.....	".....
General Superintendent.....	J. F. Miller.....	Columbus, Ohio.....
Division Superintendent.....	J. J. Turner.....	Pittsburgh, Pa.....
Division Superintendent.....	F. G. Darlington.....	Indianapolis, Ind.....
Division Superintendent.....	W. B. Leeds.....	Richmond, Ind.....
Division Superintendent.....	C. M. Bennett.....	Logansport, Ind.....
Division Superintendent.....	H. I. Miller.....	Louisville, Ky.....
Division Superintendent.....	Ralph Peters.....	Cincinnati, Ohio.....
Superintendent of Telegraph.....	A. M. Schoyer.....	Pittsburgh, Pa.....
General Freight Agent.....	Wm. Stewart.....	".....
Assistant General Freight Agent.....	D. T. McCabe.....	Columbus, Ohio.....
General Passenger and Ticket Agent.....	E. A. Ford.....	Pittsburgh, Pa.....
Chief Assistant Gen'l Passenger Agent.....	Frank Van Dusen.....	".....
General Baggage Agent.....	R. R. Bentley.....	".....
Purchasing Agent.....	Wm. Mullins.....	".....
Superintendent of Motive Power.....	E. B. Wall.....	Columbus, Ohio.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
George B. Roberts.....	Philadelphia, Pa.....	April, 1895.....
Frank Thomson.....	".....	".....
J. N. Du Barry.....	".....	".....
John P. Green.....	".....	".....
James McCrea.....	Pittsburgh, Pa.....	"..... 1894.....
Thos. D. Messler.....	".....	".....
W. H. Barnes.....	Philadelphia, Pa.....	".....
Henry H. Houston.....	Eric, Pa.....	"..... 1893.....
J. T. Brooks.....	Pittsburgh, Pa.....	".....
John E. Davidson.....	".....	".....
Wm. Stewart.....	".....	"..... 1896.....
Geo. Willard.....	Chicago, Ill.....	".....
Briggs S. Cunningham.....	Cincinnati, Ohio.....	".....

ENGLEWOOD CONNECTING RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Thos. D. Messler	Pittsburgh, Pa.....
Vice-President.....	James McCrea.....	"
Secretary	S. B. Liggett.....	"
Treasurer.....	T. H. B. McKnight.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
T. D. Messler.....	Pittsburgh, Pa.....	April 13, 1893.....
W. W. Chandler	Chicago, Ill.	"
Wm. Borner	"	"
F. W. Belz	"	"
J. H. Luce	"	"

QUINCY, OMAHA & KANSAS CITY RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Trustees in possession.....	John Payton and Edwin Parsons	New York.....
Agent for trustees.....	Amos Green	Quincy, Ill.....
Cashier for trustees	E. J. Parker.....	"
General Attorneys.....	Berry, O'Hara & Scho- field.....	"
Auditor	John M. Savin	"
Superintendent of Transportation.....	C. E. Soule.....	"
Superintendent of Telegraph	A. B. Cowan.....	"
Traffic Manager.....	J. H. Best	"

ROCK ISLAND & PEORIA RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	R. R. Cable.....	Rock Island, Ill.....
Vice-President.....	A. Kimball.....	Davenport, Ia.....
Secretary and Treasurer.....	H. B. Sudlow.....	Rock Island, Ill.....
Auditor	R. H. Hudson.....	"
General Superintendent.....	H. B. Sudlow.....	"
Superintendent of Telegraph.....	H. P. Greenough.....	"
Gen'l Freight, Passenger and Ticket Ag't	R. Stockhouse.....	"
Agent in Illinois for transfer of stock....	H. B. Sudlow.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
R. R. Cable.....	Chicago, Ill.....	June, 1894.....
H. H. Porter.....	".....	" 1893.....
Thomas F. Withrow.....	".....	" 1893.....
H. B. Sudlow.....	Rock Island, Ill.....	" 1894.....
David Dows.....	New York.....	" 1893.....
A. Kimball.....	Davenport, Ia.....	" 1893.....
G. W. Cable.....	".....	" 1894.....

ST. LOUIS, ALTON & SPRINGFIELD RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Chas. E. Kimball.....	New York.....
Receiver.....	Joseph Dickson.....	Springfield, Ill.....
First Vice-President.....	Chas. E. Kimball.....	New York.....
Secretary.....	Jo-seph Dickson.....	St. Louis, Mo.....
Treasurer.....	Chas. E. Kimball.....	New York.....
Counsel for Receiver.....	Eleneious Smith.....	St. Louis, Mo.....
Auditor.....	D. S. Mitchell.....	Springfield, Ill.....
General Manager.....	H. A. Fisher.....	".....
Chief Engineer.....	B. W. McLean.....	Alton, Ill.....
Acting Superintendent.....	F. E. Fisher.....	Springfield, Ill.....
Superintendent of Telegraph.....	H. A. Fisher.....	".....
General Freight Agent.....	F. E. Fisher.....	".....
General Passenger Agent.....	F. E. Fisher.....	".....
General Ticket Agent.....	D. S. Mitchell.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Chas. E. Kimball.....	New York.....	2d Monday in June, 1892.
H. A. Fisher.....	Springfield, Ill.....	".....
D. W. Smith.....	".....	".....
F. E. Fisher.....	".....	".....
Joseph Dickson.....	".....	".....

ST. LOUIS, ALTON & TERRE HAUTE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	Geo. F. Peabody.....	New York.....
President.....	Geo. W. Parker.....	St. Louis, Mo.....
Secretary.....	Edward F. Leonard.....	Springfield, Ill.....
Treasurer.....	Geo. W. Parker.....	St. Louis, Mo.....
Auditor.....	Henry T. Nash.....	".....
General Manager.....	Geo. W. Parker.....	".....
Assistant General Manager.....	Clarence F. Parker.....	".....
General Superintendent.....	W. S. Wilson.....	Pineknayville, Ill.....
Superintendent of Telegraph.....	W. S. Wilson.....	".....
General Freight Agent.....	Geo. E. Lary.....	St. Louis, Mo.....
General Passenger Agent.....	Geo. E. Lary.....	".....
General Ticket Agent.....	Geo. E. Lary.....	".....
General Baggage Agent.....	Geo. E. Lary.....	".....
Agent in Illinois for transfer of stock.....	Edward F. Leonard.....	Springfie'd, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term
Geo. F. Peabody	New York	June, 1893
Wm. B. Cutting	"	"
Spencer Trask	"	"
Wm. A. Reed	"	"
E. Fulton Cutting	"	"
Geo. W. Parker	St. Louis, Mo.	" 1894
F. M. Youngblood	Carbondale, Ill.	"
Eli Wiley	Charleston, Ill.	"
W. K. Murphy	Pineknayville, Ill.	"
Jas. A. Eads	Paris, Ill.	" 1895
Henry H. Beach	Litchfield, Ill.	"
Levi Davis	Alton, Ill.	"
Edward Abend	Belleville, Ill.	"

BELLEVILLE & CARONDELET RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	M. T. Stookey	Belleville, Ill.
Secretary	Henry T. Nash	St. Louis, Mo.
Treasurer	Geo. W. Parker	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
M. T. Stookey	Belleville, Ill.	June, 1893
E. F. Leonard	Springfield, Ill.	"
Edward Abend	Belleville, Ill.	"
Geo. W. Parker	St. Louis, Mo.	"
C. F. Parker	"	"

BELLEVILLE & ELDORADO RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	E. F. Leonard	Springfield, Ill.
Secretary	Henry T. Nash	St. Louis, Mo.
Treasurer	R. Fulton Cutting	New York, N. Y.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
E. F. Leonard.....	Springfield, Ill.....	June 2, 1893.....
W. R. Ward.....	Benton, Ill.....	".....
W. K. Murphy.....	Pineknayville, Ill.....	".....
W. S. Wilson.....	".....	".....
Geo. W. Parker.....	St. Louis, Mo.....	".....
H. S. Nash.....	".....	".....
F. M. Youngblood.....	Carbondale, Ill.....	".....

BELLEVILLE & SOUTHERN ILLINOIS RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Thos. Denny.....	New York.....
Secretary.....	Edward F. Leonard.....	Peoria, Ill.....
Assistant Secretary.....	H. A. Crosby.....	New York.....
Treasurer.....	J. K. Gapen.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Thos. Denny.....	New York.....	June, 1893.....
Edward F. Leonard.....	Peoria, Ill.....	".....
E. H. Perkins, Jr.....	New York.....	".....
Chas. Butler.....	".....	".....
Ed. M. Bulkeley.....	".....	".....
R. Fulton Cutting.....	".....	".....
Edward Oathant.....	".....	".....
Spencer Trask.....	".....	".....
Geo. W. Parker.....	St. Louis, Mo.....	".....

CHICAGO, ST. LOUIS & PADUCAH RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	W. K. Murphy.....	Pineknayville, Ill.....
Secretary and Treasurer.....	Henry Nash.....	St. Louis, Mo.....
Assistant Secretary.....	Henry A. Crosby.....	New York.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
W. K. Murphy.....	Pickneyville, Ill.....	June, 1893.....
Geo. W. Parker.....	St. Louis, Mo.....	" "
H. T. Nash.....	" "	" "
W. E. Ward.....	Benton, Ill.....	" 1895.....
E. F. Leonard.....	Springfield, Ill.....	"
C. F. Parker.....	St. Louis, Mo.....	" 1894.....
F. M. Youngblood.....	Carbondale, Ill.....	"

ST. LOUIS SOUTHERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Ephraim C. Dawes.....	Cincinnati, O.....
First Vice-President.....	Chas. W. Fairbanks.....	Indianapolis, Ind.....
Secretary.....	Frank J. Richmann.....	"
Treasurer.....	John E. McGettigan.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Ephraim C. Dawes.....	Cincinnati, O.....	September 1, 1893.....
Chas. W. Fairbanks.....	Indianapolis, Ind.....	"
S. M. Dodds.....	St. Louis, Mo.....	"
Samuel T. Brush.....	Carbondale, Ill.....	September 6, 1892.....
N. H. Fairbanks.....	Chicago, Ill.....	"
J. M. Richart.....	Carbondale, Ill.....	"
C. H. Bosworth.....	Springfield, Ill.....	"

CARBONDALE & SHAWNEETOWN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	J. E. McGettigan.....	Indianapolis, Ind.....
Vice-President.....	E. Jacoby.....	"
Secretary.....	Frank J. Richmann.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. E. McGettigan	Indianapolis, Ind.	September, 1893.
E. Jacoby	"	"
F. J. Richmann	"	"
C. H. Bosworth	Springfield, Ill.	"
S. T. Brush	Carbondale, Ill.	"
F. W. Tracy	Springfield, Ill.	"
E. F. A. Chapman	Murphysboro, Ill.	"

ST. LOUIS & EASTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board	Wm. E. Guy	St. Louis, Mo.
President	Wm. E. Guy	"
First Vice-President	Geo. O. Carpenter, Jr.	"
Secretary	Jas. L. Blair	"
Treasurer	Wm. E. Guy	"
General Counsel	Jas. L. Blair	"
General Manager	Wm. E. Guy	"
Chief Engineer	Robert Moore	"
Superintendent	J. D. Crabb	"
Agent in Illinois for transfer of stock....	Wm. E. Guy	Glen Carbon, Ill.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
H. R. Durkee	Chicago, Ill.	January 10, 1893.
J. S. Brewer	"	" 10, 1893.
Louis Kolb	Marine, Ill.	" 14, 1895.
E. W. Guy	Belleville, Ill.	" 13, 1894.
Wm. E. Guy	St. Louis, Mo.	" 14, 1895.
Geo. O. Carpenter, Jr.	"	" 10, 1893.
W. F. Niedringhaus	"	" 13, 1894.

ST. LOUIS & PEORIA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	G. E. Taintor	New York
Secretary	A. J. Moorshead	Springfield, Ill.
General Manager	A. J. Moorshead	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
G. E. Taintor	New York	April 1, 1893.....
William Binney, Jr.	Providence, R. I.	" "
Ira S. Younglove	Chicago, Ill.	" 1892.....
Chas. A. Aldrich.....	"	" "
Amos W. Martin.....	"	" "

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Wm. Taussig.....	St. Louis, Mo.....
First Vice-President.....	Jno. F. Barnard.....	"
Secretary.....	James Hanna.....	"
Treasurer.....	A. H. Calef.....	New York
Attorney.....	M. F. Watts.....	St. Louis, Mo.....
Auditor.....	James Hanna.....	"
General Manager	Wm. Taussig.....	"
Ass't to Gen'l Man. and Chief Engineer..	H. P. Taussig.....	"
General Superintendent.....	J. Q. Van Winkle.....	"
Assistant Superintendent.....	Frank Stilwell.....	"
Superintendent of Telegraph.....	E. A. Chenery.....	"
General Passenger and Ticket Agent....	Victor W. Fisher.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Wm. Taussig	St. Louis, Mo.....	March, 1893.....
S. H. H. Clark.....	"	"
Geo. C. Smith	"	"
C. M. Hays.....	"	"
M. H. Smith.....	Louisville, Ky.....	"
M. E. Ingalls.....	Cincinnati, O.....	"
Jno. F. Barnard.....	"	"

ST. LOUIS BRIDGE COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Wm. Taussig.....	St. Louis, Mo.....
Vice-President.....	Julius S. Walsh	"
Secretary	V. W. Fisher	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
J. Pierpont Morgan.....	New York.....	March 7, 1895.....
Julius S. Walsh.....	St. Louis, Mo.....	"
Wm. Taussig.....	"	"
Thos. E. Tutt.....	"	"
Edw. Walsh, Jr.....	"	"

ST. LOUIS, VANDALIA & TERRE HAUTE RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Thos. D. Messler.....	Pittsburgh, Pa.....
Vice-President.....	James McCrea.....	"
Secretary.....	S. B. Liggett.....	"
Treasurer.....	T. H. B. McKnight.....	"
Assistant Secretary.....	C. D. Hoiles.....	Greenville, Ill.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Thos. D. Messler.....	Pittsburgh, Pa.....	January 10, 1893.....
Jas. McCrea.....	Philadelphia, Pa.....	"
W. H. Barnes.....	Terre Haute, Ind.....	"
W. R. McKeen.....	Highland, Ill.....	"
R. L. Dulaney.....	Greenville, Ill.....	"
A. G. Henry.....	Highland, Ill.....	"
C. H. Seybt.....	Collinsville, Ill.....	"
J. S. Peers.....	St. Louis, Mo.....	"
E. O. Stanard.....		

TERRE HAUTE & PEORIA RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board and President...	C. W. Fairbanks.....	Indianapolis, Ind.....
Secretary.....	F. J. Richmann.....	"
Treasurer.....	I. H. Burgoon.....	Decatur, Ill.....
General Solicitor.....	E. Jacoby.....	Indianapolis, Ind.....
Cashier.....	T. M. Hobart.....	Decatur, Ill.....
Auditor.....	W. M. Strange.....	"
General Manager.....	I. H. Burgoon.....	"
Superintendent of Telegraph.....	I. H. Burgoon.....	"
General Freight Agent.....	J. H. Sessions.....	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
C. W. Fairbanks.....	Indianapolis, Ind.....	January, 1893.....
E. Jacoby.....	".....	" 1893.....
J. H. Burgoon.....	Decatur, Ill.	" 1893.....
John W. Bunn.....	Springfield, Ill.....	" 1894.....
C. O. Chestnut.....	Paris, Ill.....	" 1894.....

TOLEDO, PEORIA & WESTERN RAILWAY COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Executive Com. Board.	Chas. Moran.....	New York.....
President.....	E. F. Leonard.....	Peoria, Ill.....
Vice-President.....	E. N. Armstrong.....	".....
Secretary.....	E. D. Usner.....	".....
Treasurer.....	E. F. Leonard.....	".....
Attorney.....	W. S. Horton.....	".....
Auditor.....	E. D. Usner.....	".....
General Manager.....	E. F. Leonard.....	".....
General Superintendent.....	E. N. Armstrong.....	".....
Superintendent of Telegraph.....	C. B. Plautz.....	".....
General Freight Agent.....	D. Mowat.....	".....
Acting General Passenger Agent.....	E. N. Armstrong.....	".....
Acting General Ticket Agent.....	E. N. Armstrong.....	".....
Acting General Baggage Agent.....	E. N. Armstrong.....	".....
Agent in Illinois for transfer of stock....	E. D. Usner.....	".....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Joel E. Fisher.....	New York.....	September, 1892.....
E. F. Leonard.....	Springfield, Ill.....	".....
E. N. Armstrong.....	Peoria, Ill.....	".....
E. D. Usner.....	".....	" 1893.....
W. S. Horton.....	".....	".....
Jno. W. Bunn.....	Springfield, Ill.....	".....
Chas. Moran.....	New York.....	" 1894.....
Cornelius B. Gold.....	".....	".....
Wm. H. Gebhard.....	".....	".....

TOLEDO, ST. LOUIS & KANSAS CITY RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President	S. R. Callaway	New York
Secretary and Assistant Treasurer.....	M. L. Crowell	"
Treasurer	W. Howard Gilder	"
General Solicitor.....	Clarence Brown	Toledo, O.
Auditor	D. D. Davis	"
General Manager.....	S. R. Callaway	"
Chief Engineer.....	A. L. Mills	"
Superintendent	C. N. Pratt	Frankfort, Ind.
Supt. Mach'y & R. S.	John Orton	"
Chief Surgeon.....	S. S. Thorne	Toledo, O.
Superintendent of Telegraph	N. McKinnon	"
General Freight Agent	W. S. Weed	"
Assistant General Freight Agent	D. F. Jennings	St. Louis, Mo.
General Passenger Agent.....	C. C. Jenkins	Toledo, O.

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
R. G. Ingersoll	New York	September 9, 1892.....
J. M. Quigley	"	"
Francis L. Russ	"	"
W. Howard Gilder	"	"
Robert Harris	"	" 1893
Clarence Brown	Toledo, O.	" 1894
S. R. Callaway	"	"
Jos. O. Osgood	New York	"
Randolph F. Purdy	"	"
S. H. Knerland	"	"
J. S. Stout	"	"
F. J. Sawyer	Buffalo, N. Y.	"

WABASH RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
Chairman of the Board.....	O. D. Ashley	New York
President	O. D. Ashley	"
Vice-President.....	Edgar T. Wells	"
Vice-President.....	James F. How	St. Louis, Mo.
Secretary	J. C. Otteson	New York
Treasurer.....	F. L. O'Leary	St. Louis, Mo.
General Solicitor.....	W. H. Blodgett	"
Auditor	D. B. Howard	"
Assistant Auditor	E. B. Pryor	"
General Manager	C. M. Hays	"
Chief Engineer.....	W. S. Lincoln	"
General Superintendent.....	H. L. Magee	"
Division Superintendent	E. A. Gould	Peru, Ind.
Division Superintendent	J. S. Goodrich	Chicago, Ill.
Division Superintendent	F. H. McGuigan	Kansas City, Mo.
Superintendent of Telegraph	G. C. Kinsman	Decatur, Ill.
Traffic Manager	M. Knight	St. Louis, Mo.
General Freight Agent	S. B. Knight	"
Assistant General Freight Agent.....	J. D. Lund	"
General Passenger Agent.....	F. Chandler	"
Assistant General Passenger Agent.....	C. S. Crane	"
General Ticket Agent.....	F. Chandler	"
Assistant General Ticket Agent	C. S. Crane	"
General Baggage Agent.....	S. H. Overholt	"

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Edgar T. Wells	New York	September 13, 1892.....
Thomas H. Hubbard.....	.....	.....
James F. Joy	Detroit, Mich .....	.....
Henry K. McHarg.....	New York.....	.....
Sidney Dillon.....	.....	.....
Russell Sage.....	.....	.....
Geo. J. Gould.....	.....	.....
Cyrus J. Lawrence.....	.....	.....
Jno. T. Terry .....	.....	.....
James F. How.....	St. Louis, Mo.....	.....
Chas. M. Hays.....	.....	.....
S. C. Reynolds.....	Toledo, O.....	.....
O. D. Ashley.....	New York.....	.....

WABASH, CHESTER & WESTERN RAILROAD COMPANY.

OFFICERS.

Title.	Name.	Location of Office.
President.....	Nathan Cole.....	St. Louis, Mo
First Vice-President.....	Chas. B. Cole	Chester, Ill.
Secretary	H. C. Cole .....	.....
Treasurer.....	C. B. Cole .....	.....
Attorney.....	H. C. Horner.....	.....
Auditor	C. E. Kingsbury.....	.....
General Manager	Chas. B. Cole .....	.....
Superintendent	J. R. Hawkins .....	.....
General Freight and Passenger Agent.....	C. E. Kingsbury.....	.....
Agent in Illinois for transfer of stock.....	H. C. Cole .....	.....

DIRECTORS.

Name.	Post-Office Address.	Date of Expiration of Term.
Nathan Cole	St. Louis, Mo	March, 1894.....
Chas. B. Cole	Chester, Ill.....	..... 1895.....
H. C. Cole.....	.....	.....
Z. T. Cole .....	.....	..... 1893.....
T. C. Bryden.....	Carbondale, Ill.....	.....

LIST OF RAILROADS INCORPORATED DURING THE YEAR ENDING JUNE 30, 1892.

The Litchfield Belt Railway Co. From a point on the C., C., C. & St. Louis Ry., through South Litchfield to a point on the C., C., C. & St. Louis Ry. office, Litchfield, Ill. Capital stock, \$20,000. Directors, J. B. W. Amaden, H. H. Beach, David Davis and Delos VanDusen, Litchfield, Ill., and L. C. Haynes, St. Louis Mo. Filed July 1, 1891.

Blue Island Railroad Co. From a point in the village of Blue Island; Cook county, Ill., in a northeasterly direction to a point on the Michigan Central in the town of Calumet, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$25,000. Directors, Josiah B. Crooker, Minneapolis, Minn., and E. M. Warren, Wm. J. Haerther, Henry Biehl and Harry M. Packham, Chicago, Ill. Filed July 7, 1891.

Chicago South Side Elevated Railway Co. From Van Buren street, Chicago, Ill., in a southerly, southeasterly and southwesterly direction to Chicago Heights, Cook county, Ill. Office, Chicago, Ill. Capital stock, \$10,000,000. Directors, George W. Cole, J. Warren Pease, C. R. Matson, Albert Wahl and Silas Rhoades, Chicago, Ill., and Benjamin F. Richolson, J. M. Getman, Pleasant Arnick and Jas. E. Harder. Filed July 16, 1891.

The Harrison Street and DesPlaines River Railroad Co. From a point within 1,300 feet of the intersection of Western avenue and West Harrison street, Chicago, Ill., to a point on the DesPlaines river not more than 1,300 feet from West Harrison street, Chicago, Ill. Office, Chicago, Ill. Capital stock, \$112,500. Directors, Edward L. Stewart, Stephen G. Swisher, G. Grant Stewart, Walter B. Phister and Hamilton H. Ingham, Chicago, Ill. Filed July 17, 1891.

Wabash Avenue Sub-Railway Transportation Co. From a point on the Chicago river at the south end of Cass street, Chicago, Ill., in a southerly direction to 83d street in said city, together with all the necessary branches, switches, turn-tables, turn-outs and curves along the line of the said proposed railway. Office, Chicago, Ill. Capital stock, \$10,000,000. Directors, Geo. W. Cole, Silas Rhoades, J. Warren Pease, Maria E. Beasley and Pleasant Arnick, Chicago, Ill. Filed August 1, 1891.

The Chicago, Evanston & Southern Elevated Railway Co. From a point within the corporate limits of Evanston, Ill., in a southerly, southeasterly and southwesterly direction to Blue Island, Ill., together with all the necessary branches, switches, etc., along the line of the said proposed elevated railway. Office, Chicago, Ill. Capital stock, \$20,000,000. Directors, Geo. W. Cole, C. R. Matson, J. W. Pease, J. M. Getman and Pleasant Arnick, Chicago, Ill. Filed August 20, 1891.

The Barre Sliding Railway Co. From the intersection of Cottage Grove Avenue with Midway Plaisance; Chicago, Ill., along and upon said Midway Plaisance to Jackson Park, and through and about Jackson Park. Office, Chicago, Ill. Capital stock, \$300,000. Directors, Charles A. A. Barre,

Paris, France; Aster Kissam, London, England, and Moses A. Meyer, Philipp Horvath, Eli B. Felsenthal, Frank W. Smith and Francis E. Hinckley, Chicago, Ill. Filed August 21, 1891.

The Chicago and South Park Elevated Railway Co. From a point on Lake street, Chicago, Ill., between Wabash avenue and Halsted street, in a southerly and westerly direction to the west line of Cook county, together with all necessary sidings, switches, etc. Office, Chicago, Ill. Capital stock, \$2,000,000. Directors, Andrew J. Cooper, William H. Purdy, Leroy D. Thoman, James P. Mallette, John M. Gartside, Chas. P. Caldwell and P. H. Rice, Chicago, Ill. Filed August 26, 1891.

Tamara and Mt. Vernon Railway Co. From Tamara, Ill., to Mt. Vernon, Ill. Office, Chester, Ill. Capital stock, \$500,000. Directors, George W. Evans, Mt. Vernon, Ill., and H. Clay Horner, John D. Gerlach, Charles E. Kingsbury and James J. Morrison, Chester, Ill. Filed September 9, 1891.

The Aurora and Chicago Inter-Urbana Railway Co. From Aurora, Ill., to Chicago, Ill., with a branch to Batavia, Ill. Office, Aurora, Ill. Capital stock, \$1,000,000. Directors, William VanNortwick, Batavia, Ill.; Wm. J. Manning, Warrenville, Ill., and W. B. Miller, J. W. Eddy, John Meredith and John J. Luck, Aurora, Ill. Filed December 30, 1891.

The Terre Haute, Saylor Springs and Chester Railway Co. From a point on the eastern boundary of Clark county, Ill., via Saylor Springs to Chester, Ill. Office, Saylor Springs, Ill. Capital stock, \$3,300,000. Directors, Lewis W. Barnes and Thomas Hannifant, East St. Louis, Ill.; Benjamin F. Scaife, Andrew J. Allen and Warren C. Rhoads, Saylor Springs, Ill., and Osman Pixley and Herman Hulman. Filed January 13, 1892.

Chicago Great Western Railway Co. From a point on the boundary line between the states of Indiana and Illinois, at or near the southeast corner of section five, township thirty-six, in a westerly, northerly and easterly direction to a point on the shore of Lake Michigan in section thirty-two, township forty-one. Office, Chicago, Ill. Capital stock, \$90,000,000. Directors, John L. Pratt, Sycamore, Ill.; Samuel C. Stickney, Henry A. Gardner, William A. Gardner and Parke E. Simmons, Chicago, Ill., and Robert C. Wright, Charles Nichols, Raymond DuPuy and Emerson Hadley, St. Paul, Minn. Filed January 16, 1892.

Chicago and St. Louis Electric Railroad Co. From Chicago, Ill., to East St. Louis, Ill., with various branches. Office, East St. Louis, Ill. Capital stock, \$1,000,000. Directors, S. R. McBurney, St. Louis, Mo.; A. C. Carper, St. Louis, Mo., and Walter E. Beckwith, Thomas May, Jr., and E. C. Rhoads, East St. Louis, Ill. Filed January 21, 1892.

Chicago, Keokuk and Southwestern Railroad Co. From Havana, Ill., to a point on the Mississippi River in Hancock county, Ill., and from Hamilton, Ill., to Keokuk, Iowa; or from the west end of the Keokuk and Hamilton bridge to the bridge over the Des Moines river at Buena Vista, Iowa. Office, Keokuk, Iowa. Capital stock, \$1,000,000. Directors, Wm. Logan and W. K. Johnson, Keokuk, Iowa; Thomas Hamer, Vermont, Ill.; M. Leroy, Hamilton, Ill., and George Edmunds, Carthage, Ill. Filed January 21, 1892.

The Ottawa, Starved Rock and Western Railway Co. From Ottawa, Ill., to Starved Rock, Ill., and such other extensions as may be deemed necessary. Office, Ottawa, Ill. Capital stock, \$150,000. Directors, Wm. L. Phillips, Charles F. Wilson, Charles S. Cullom, John J. O'Brien and Frederick V. Hobert, Ottawa, Ill. Filed January 29, 1892.

The Joliet, DeKalb and Northern Railroad Co. From Joliet, Ill., to DeKalb, Ill., and to a point north not yet determined. Office, Chicago, Ill. Capital stock, \$1,000,000. Directors, Wm. L. Ellwood and Edgar C. Lott, DeKalb, Ill.; Wm. H. Bush and W. W. McDonald, Chicago, Ill.; Edgar W. Faxon, Edgar L. Henning and George H. Carver, Plano, Ill.; Lester Soule and James B. Spear, Joliet, Ill.; Levi Platt, Plattsville, Ill., and Truman A. Mason and John Shaw. Filed February 11, 1892.

The Chicago, Lake Geneva and Northwestern Railway Co. From Chicago, Ill., through the counties of Cook, Lake and McHenry to a point on the boundary line between the states of Illinois and Wisconsin. Office, Chicago, Ill. Capital stock, \$2,000,000. Directors, DeClermont Dunlap, Rockford, Ill., and Tremont Hill, Horace C. Alexander, John S. Monk and Frank C. Elliott, Chicago, Ill. Filed February 16, 1892.

The Rockford Terminal Railway Co. From Rockford, Ill., to a point on the Elgin, Joliet and Eastern Railway in Aurora, Ill., with a belt line surrounding Rockford, Ill. Office, Rockford, Ill. Capital stock, \$1,500,000. Directors, DeClermont Dunlap, Edward H. Marsh and Geo. F. Penfield, Rockford, Ill., and Horace C. Alexander and Tremont Hill, Chicago, Ill. Filed February 24, 1892.

The Chicago, Altamont and Paducah Railway Co. From Altamont, Ill., to Paducah, Ky. Office, East St. Louis, Ill. Capital stock, \$5,000,000. Directors, Phidello Smith, Clinton, Ohio; Walter G. Gowen, Chartani, Pa., and J. B. Messick, Thomas Fekete and E. C. Rhoads, East St. Louis, Ill. Filed March 2, 1892.

The St. Louis and East St. Louis Terminal Railway Co. From East St. Louis, Ill., through the counties of St. Clair and Madison to a connection with the railways constructed, or that may be hereafter constructed, to East St. Louis and Madison, Ill. Office, Jacksonville, Ill. Capital stock, \$500,000. Directors, Isaac L. Morrison, Francis Hook, William S. Hook and Marcus Hook, Jacksonville, Ill., and Thomas J. Hook, Denver, Col. Filed March 8, 1892.

The Springfield, Pawnee and Southern Railroad Co. From Springfield, Ill., to Pinckneyville, Ill. Office, Pawnee, Ill. Capital stock, \$2,000,000. Directors, Jonn White, Henry R. Davis, Hiram White, C. E. Clayton and Luther K. Davis, Pawnee, Ill., and Columbus White, Taylorville, Ill. Filed March 8, 1892.

The Metropolitan West Side Elevated Railway Co. From a point on the west shore of Lake Michigan between Twelfth street and the Chicago River, Chicago, Ill., in a westerly direction to the western limits of the town of Cicero, with branches to the southern and northern limits of Chicago. Office, Chicago, Ill. Capital stock, \$15,000,000. Directors, Edson J. Haikness, Herman Benze, John H. Glade, John Worthy and William W. Gurley, Chicago, Ill. Filed March 10, 1892.

The Joliet, DeKalb and Northern Railroad Co. From Joliet, Ill., to DeKalb, Ill., and to a point north not yet determined. Office, Chicago, Ill. Capital stock, \$1,000,000. Directors, William L. Ellwood and Edward C. Lott, DeKalb, Ill.; William H. Bush and W. W. McDonald, Chicago, Ill.; Edgar W. Faxon, Edgar L. Henning and George H. Carver, Plano, Ill.; Lester Soule and James B. Spear, Joliet, Ill., and John Shaw and Truman A. Mason. Filed March 10, 1892.

The Belleville and St. Louis Electric Railway Co. From Belleville, Ill., to East St. Louis, Ill. Office, East St. Louis, Ill. Capital stock, \$200,000. Directors, George W. Atterbury and John D. Filley, St. Louis, Mo.; John J. McLean, Hillsboro, Ill.; James H. Atterbury and John W. Griswold, Litchfield, Ill., and Paul W. Abt, East St. Louis, Ill. Filed March 11, 1892.

Chicago Union Elevated Railway Co. From a point on Franklin street, between Madison street and Twelfth street, Chicago, Ill., in a westerly direction to the western limits of the town of Cicero, with branches running in a northwesterly, southwesterly and southeasterly direction. Office, Chicago, Ill. Capital stock, \$17,000,000. Directors, John Tyler, Thomas F. O'Malley, William W. Bell, Geo. E. Scott and George M. Eckels, Chicago, Ill. Filed March 18, 1892.

Calumet Belt Railroad Co. From a point on the South Chicago Railroad in Chicago, Ill., at or near the intersection of Erie Avenue and South Chicago Avenue, in a southerly and southeasterly direction to the State line in the township of Thornton, with a branch westwardly to a point

on the Illinois Central Railroad between Kensington and Harvey. Office, Chicago, Ill. Capital stock, \$25,000. Directors, B. F. Ayer, Henry DeWolf, John Dunn, E. P. Skene and Wm. G. Bruen, Chicago, Ill. Filed, March 21, 1892.

Elgin, Aurora and Fox River Electric Railway Co. From the north line of Dundee township, Kane county, Ill., to the south line of Aurora township, Kane county, Ill. Office, St. Charles, Ill. Capital stock, \$400,000. Directors, John M. Egan, St. Paul, Minn.; William Grote, Elgin, Ill.; Henry H. Evans and Arthur M. Beaupre, Aurora, Ill.; Terence E. Ryan, St. Charles, Ill., and Henry A. Gardner, Chicago, Ill. Filed April 25, 1892.

St. Louis, Chicago and St. Paul Railroad Co. From East St. Louis, Ill., to Alton, Ill., and to operate the St. Louis, Alton and Springfield Railroad. Office, Alton, Ill. Capital stock, \$2,000,000. Directors, Henry O'Hara, St. Louis, Mo., and Anthony Isch, Clark L. Whitney, Royal J. Whitney and James E. Whitney, East St. Louis, Ill. Filed May 6, 1892.

The Quincy, Beardstown and Havana Railroad Co. From Quincy, Ill., to a point on the Illinois river opposite Havana, Ill., or to a point on the Illinois river opposite Beardstown, Ill. Office, Quincy, Ill. Capital stock, \$2,500,000. Directors, Richard F. Newcomb, William S. Warfield, Frederick W. Meyer, Chauncey H. Castle, Jonathan Parkhurst, David Stern, Isaac Lesem, F. W. Menke, Edson H. Todd, Willard P. Upham, Elisha B. Hamilton, Proctor Taylor, Louis Wolf and L. C. Neustadt, Quincy, Ill., and David M. Halstead, Keithsburg, Ill. Filed May 12, 1892.

The Chicago, Peoria and Southwestern Railroad Co. From Chicago, Ill., to Peoria, Ill. Office, Chicago, Ill. Capital stock, \$5,000,000. Directors, James R. Lane, C. R. Matson, Christopher O. Closter and Samuel M. Rowe, Chicago, Ill., and Lucius Clark, Marseilles, Ill. Filed May 26, 1892.

The Chicago and Suburban Rapid Transit Railway Co. From the intersection of Lake and Halsted streets, Chicago, Ill., in a southerly direction to a point on 130th street at or near Blue Island, Cook county, with a branch running in a southeasterly direction to a point on the Calumet river at or near 100th street, Chicago, Ill., and with a branch running in a southwesterly direction to a point on Western avenue near the Calumet river. Office, Chicago, Ill. Capital stock, \$5,000,000. Directors, Irus Coy, James H. Ashby, C. P. Caldwell, M. J. Tierney and George C. Lazear, Chicago, Ill. Filed May 30, 1892.

The Baltimore and Ohio Connection Railroad Co. From Beverly Hills, Cook county, Ill., in a northwesterly direction to a junction with the Chicago Central Railway in Chicago, Ill. Office, Chicago, Ill. Capital stock, \$200,000. Directors, Robert B. Campbell, Granville A. Richardson, Leonard S. Allen, Alfred P. Bigelow and William J. Kenney, Chicago, Ill. Filed June 30, 1892.

GRAIN INSPECTION DEPARTMENT.

STATE OF ILLINOIS,
OFFICE OF CHIEF INSPECTOR OF GRAIN FOR THE CITY OF CHICAGO,
CHICAGO, December 23, 1892.

Hon. Isaac N. Phillips, Chairman Railroad and Warehouse Commission, Springfield, Ill.:

□ DEAR SIR:—I have the honor to submit herewith the twenty-first annual report of the transactions of this department.

The time covered by this report is the year beginning November 1, 1891, and ending October 31, 1892. It gives me pleasure to say of this year, as I have been able to say of each of its two immediate predecessors, that "it has been the most prosperous year in the history of the department."

It is a gratifying evidence, not only of the growing importance of Chicago as a grain market, but of the rapid development of her tributary country, that the amount of grain handled here has doubled within the last eight years, and that the growth has been constant and steady,—each year showing a substantial increase over the one preceding it.

We have received during the year 320, 572 cars containing 244,609,876 bushels of grain;—an increase over last year of 43,356 cars, and over 43,000,000 bushels. This is exclusive of 389 canal boats containing 2,116,367 bushels.

APPEALS.

It is needless to say that the vast amount of grain represented by the figures above given has not been handled without some differences of opinion between inspectors and owners: but, in the main, the relations between the department and the public have been exceptionally pleasant and satisfactory. Of the 960 cars upon which the committee of appeals has been called to act, the grades of 429 (one out of every 747 cars inspected) were raised.

The fact that the committee on careful examination felt justified in changing less than half of the cars upon which they were called, shows not only that the inspectors have done their work with care and skill, but that the trade only felt it necessary to appeal in cases where an honest difference of opinion might reasonably exist.

SUPERVISION.

In this connection a word in illustration of the difficulties under which the work of the department (and especially the original inspection) is performed, and the means employed to overcome them, may not be amiss.

The work of the inspector is to classify the grain according to its quality and condition, in order that it may go into store and be mixed only with other grain of like quality and condition, or be sold at a price based upon what has come to be a recognized comparative standard of value. In so classifying the grain he gives it one or another of the sixty-two (62) established grades of grain, as his judgment may dictate.

The requirements of each of these grades is fixed by a rule established by the Railroad and Warehouse Commissioners; but as the inspection of grain is not an "exact science," and as the grades necessarily approach each other by imperceptible degrees, and meet upon debatable ground; it will be seen that the written rules serve as a guide rather than as an inflexible standard for the inspector; and that upon his judgment the final and practical application of the rule necessarily depends.

It is therefore evident that an inspector must not only have that expert knowledge of the grain itself which comes of years of experience, but that he must have such absolute familiarity with the requirements of each grade as to enable him promptly and accurately to give each car its proper grade, and to state, clearly and concisely, the reasons which lead to his decision.

An efficient and reliable inspector must also have evenness of judgment, the faculty of so carrying a grade in his mind that he will give a particular lot of grain the same grade he gave a similar lot a week or a month before, and a tenacity of opinion that cannot be affected by any comments of the interested parties by whom he is usually surrounded.

In grading the grain that passes through his hands every conscientious inspector is influenced by the fact that he is, in a certain sense, acting as an arbitrator between buyer and seller, virtually making an appraisal of another's property, and fixing the price at which it shall be bought and sold.

It is not to be assumed that any inspector is infallible, or that he will always adhere to established lines with unwavering accuracy. In fact, there is a well-recognized tendency among the best inspectors (when not properly supervised or enabled in some other way to compare their work with that of others) to swerve, unconsciously and imperceptibly to themselves, from their established lines.

Having fifteen different men, on as many different tracks, remote from each other, and with no "pole-star" by which to "correct their reckoning," we should soon have as many different standards as men, but for our system of "supervising inspectors."

These two men, selected for their evenness and accuracy of judgment and their expert knowledge of grain, have been in the service of the department for twenty and fifteen years, respectively. Every day they go from one track to another, watching the work of the inspectors, and correcting in them any tendency they may see to deviate in one direction or the other from the well understood and established standards of the department.

In this way we are enabled so to direct the work that, although the grain is received from so many different sections of the country, and is grown under such diverse conditions of soil and climate, the average quality and market value of any particular grade is substantially the same in each of the twenty-seven different public warehouses in which it is stored: and may be (as it daily is) confidently purchased by Eastern and European dealers, with no other knowledge or guaranty of its quality than the certificate of the department.

The necessity and importance of this constant supervision is more apparent when one remembers that the responsibility of the department does not cease with the affixing of the original grade, but that the millions of bushels of grain going into store must also be inspected out, that the buyer as well as the seller must be satisfied, and that there is safety only along the line of exact and inflexible justice to all parties concerned.

THE FORCE OF THE DEPARTMENT.

The work of inspection proper is carried on by fourteen "track inspectors," twenty-seven "house inspectors," and fourteen "helpers."

In each elevator is stationed a house inspector, whose duty it is to report to the Registrar the kind, grade and weight of each lot of grain that goes into store, and to inspect out and fully report upon all grain that is delivered from store.

The track inspectors, assisted by the helpers in the manual and clerical part of their work, grade the grain on its arrival from the country.

The helpers, in assisting the track inspectors, become familiar with the grades, and with the different varieties and qualities of grain, and may thus, by proper application, fit themselves in two or three years for service as house inspectors.

A much higher standard of efficiency being necessary in a track inspector, it is very seldom that one becomes fully qualified for promotion to that important position under six years; and, indeed, the average probation of those now serving in that capacity has been nearer nine years.

DEPARTMENT EXPENSES.

It will be seen, by reference to the statistical tables accompanying this report, that the expenses of the department for the year just closed have been about four and a half ($4\frac{1}{2}$) per cent. greater than for the previous year,—an increase which finds ample justification in the fact that the earnings have increased over thirteen (13) per cent., and that the establishment of new tracks, and changes in the conditions under which the work is done, have made additional help necessary, irrespective of the amount of grain received.

In illustration of these changed conditions, one instance may be cited. The Illinois Central Railroad has, until this year, brought all its grain, both from the main line and the Iowa Division into its yards at 16th street, where it was inspected by one "crew." Now it has established yards on its main line at Dauphin Park, ten miles south, and on the Madison & Northern branch at Hawthorne, seven miles west of the 16th street yard, and it requires two "crews" to do the work which might readily be done by one if the cars could all be brought to a common center.

The gradual spreading out of the territory covered by the department, and the increased number of elevators in constant use, have made it necessary (in order to have our samples and reports at the office in time for the opening of business each morning) to employ an additional messenger, which was done in February last, with the approval of your honorable Board.

In conclusion, I wish to say that the employés of the department have shown commendable zeal and fidelity in their various places, and that no necessity for discipline has arisen during the year.

Respectfully submitted,

P. BIRD PRICE,
Chief Inspector.

EXHIBIT A—3.

Inspection on Arrival—By Months.

MONTHS.	CORN.							TOTAL CARS.	
	Yellow.		White.		2	3	4		Not Graded.
	2	3	2	3					
November, 1891.....	813	2,740	183	468	1,301	2,474	2,167	276	10,422
December, 1891.....	254	2,513	82	291	1,167	3,570	2,365	156	10,398
January, 1892.....	285	1,601	63	195	242	2,504	1,274	25	6,189
February, 1892.....	341	1,879	96	304	375	2,493	2,070	101	7,659
March, 1892.....	835	1,904	162	257	735	3,111	2,186	82	9,272
April, 1892.....	855	1,122	201	174	691	2,212	842	28	6,125
May, 1892.....	1,151	1,172	276	148	1,511	2,859	1,453	117	8,687
June, 1892.....	528	2,877	59	330	818	5,559	4,651	2,520	17,342
July, 1892.....	1,056	1,008	384	209	1,296	2,825	1,833	516	9,127
August, 1892.....	2,333	895	575	220	3,094	2,342	1,838	233	11,530
September, 1892.....	3,689	1,011	1,004	304	5,405	2,767	1,356	31	15,567
October, 1892.....	4,188	1,051	1,211	282	4,875	2,746	834	15	15,202
Total cars	16,328	19,773	4,296	3,182	21,510	35,462	22,869	4,100	127,520
Total estimated bushels.....									85,183,360

EXHIBIT A—4.

Inspection on Arrival—By Months.

MONTHS.	OATS.						TOTAL CARS.	RYE.				TOTAL CARS.	
	White.		2	3	White Clipped.			Not Graded.	1	2	3		Not Graded.
	2	3			1	2							
November, 1891...	1,384	4,306	1,381	1,504	....	....	70	8,645	....	964	420	18	1,402
December, 1891...	1,079	2,535	1,014	807	....	....	22	5,457	....	514	279	2	795
January, 1892.....	836	2,472	706	672	....	....	9	4,695	....	295	160	1	456
February, 1892.....	954	2,460	579	673	1	33	11	4,711	....	280	83	....	363
March, 1892.....	959	2,175	465	648	....	111	12	4,370	....	214	99	....	313
April, 1892.....	1,262	2,520	922	717	....	53	6	5,480	....	201	75	....	276
May, 1892.....	1,511	2,376	955	571	2	45	13	5,653	1	139	54	8	202
June, 1892.....	1,532	4,319	838	1,199	....	16	61	7,965	5	103	43	4	155
July, 1892.....	1,205	3,752	1,360	1,385	....	6	68	7,776	3	106	83	4	196
August, 1892.....	838	3,954	1,265	1,218	....	26	101	7,402	....	346	266	10	622
September, 1892..	460	4,516	1,735	1,621	....	26	74	8,435	....	557	251	24	832
October, 1892.....	486	4,219	836	1,368	....	25	91	7,025	....	499	260	15	774
Total cars.....	12,506	39,604	12,056	12,566	3	341	538	77,614	9	4,218	2,073	86	6,386
Total estimated bushels.....									85,064,944				3,908,232

EXHIBIT A-5.

Inspection on Arrival—By Months.

MONTHS.	BARLEY.										TOTAL CARS.	GRAND TOTAL. Cars of all kinds of Grain.
	Scotch	Bay Brew- ing.		Cheva- lier.		2	3	4	5	Not graded.		
		3	2	3	2								3
November, 1891.....	1	...	3	...	...	72	2,049	1,038	158	66	3,387	35,047
December, 1891.....	...	5	2	...	...	32	973	651	69	35	1,767	25,744
January, 1892.....	41	699	591	47	46	1,424	16,222
February, 1892.....	2	...	29	839	559	69	65	1,563	18,052
March, 1892.....	1	...	1	25	728	406	39	57	1,257	19,839
April, 1892.....	6	...	...	26	477	252	52	11	824	14,997
May, 1892.....	1	...	...	18	402	151	23	7	602	17,850
June, 1892.....	1	...	...	7	252	181	33	9	482	29,209
July, 1892.....	2	47	99	10	9	167	23,654
August, 1892.....	...	1	...	...	...	17	121	76	20	6	241	37,075
September, 1892.....	2	...	...	107	1,387	624	36	9	2,165	42,091
October, 1892.....	...	2	3	...	1	65	2,509	1,184	91	38	3,893	40,792
Total cars.....	1	8	18	2	2	441	10,483	5,812	617	358	17,772	320,572
Total estimated bushels.....13,951,020												244,609,876

EXHIBIT B-1.

Inspection on Arrival—By Railroads.

RAILROADS.	WINTER WHEAT.												TOTAL CARS.
	White.			Hard.			Red Winter.						
	2	3	4	1	2	3	1	2	3	4	Not Grad'd		
C., B. & Q.	12	26	10	179	3,444	1,451	1	760	1,573	1,243	137	8,836	
C., R. I. & P. ....	...	47	27	15	1,478	2,405	1	383	946	682	78	6,062
C. & A.	5	41	13	4	1,056	837	...	286	3,012	636	96	5,986	
Ill. Cent.	7	23	2	...	271	117	...	1,260	1,672	448	46	3,791	
Freeport Div. I. C. ....	...	...	...	...	...	...	...	...	...	...	...	...
Gal. Div. C. & N. W.	1	1	...	9	342	102	...	6	76	133	11	681	
Ws. Div. C. & N. W.	21	20	2	...	5	4	...	283	100	16	1	452	
Wabash. ....	...	13	23	2	82	75	...	249	1,378	564	46	2,432
C. & E. I.	13	30	16	...	13	5	...	820	1,149	193	100	2,389	
C., M. & St. P.	10	23	5	5	2,040	718	...	548	302	212	25	3,888	
Wis. Cent. ....	...	...	...	...	...	...	...	1	...	...	...	1
Chi. & G. W. ....	...	1	...	...	1,228	2,916	...	27	274	231	16	4,693
A., T. & S. Fe.	1	43	43	1	3,088	3,137	...	857	1,699	1,574	76	10,519	
Through and special.	4	19	13	...	153	1,136	...	939	2,579	511	81	5,435	
Total cars.	74	287	154	215	13,200	12,903	2	6,419	14,705	6,413	713	50,115	

EXHIBIT B-2.

Inspection on Arrival—By Railroads.

RAILROADS.	SPRING WHEAT.								MIXED WHEAT.		TOTAL CARS.
	Hard.	1	2	3	4	Not graded.	White.		2	3	
	2						2	3			
C., B. & Q.....	622	5,336	1,611	116	80	1,828	32	87	9,712
C., R. I. & P.....	156	419	359	12	69	729	.....	8	1,752
C. & A.....	41	153	52	6	.....	46	.....	4	302
Ill. Cent.....	125	134	43	.....	.....	8	.....	.....	310
Freeport Div. I. C.....	2	22	4	.....	.....	.....	.....	.....	28
Gal. Div. C. & N. W.....	1	434	2,886	620	38	1	209	5	20	4,214
Wis. Div. C. & N. W.....	143	276	64	3	.....	1	3	2	492
Wabash.....	2	19	12	.....	.....	7	1	9	50
C. & E. I.....	1	.....	.....	.....	1	.....	1	3
C., M. & St. P.....	2,662	2,488	636	228	15	166	.....	8	6,203
Wis. Cent.....	1	21	13	.....	.....	.....	.....	35
Chicago & Great Western...	284	640	369	54	5	82	.....	2	1,436
A., T. & S. Fe.....	422	47	5	.....	.....	2	.....	3	479
Through and special.....	1	7,361	2,544	370	129	1	741	.....	2	11,149
Total cars	1	12,254	14,966	4,166	599	171	3,820	41	146	36,165

EXHIBIT B-3.

Inspection on Arrival—By Railroads.

RAILROADS.	CORN.								TOTAL CARS.
	Yellow.		White.		2	3	4	Not graded.	
	2	3	2	3					
C., B. & Q.	3,196	3,933	349	475	6,427	9,141	5,168	878	29,567
C., R. I. & P.	1,055	1,447	139	122	4,360	5,567	2,306	483	15,479
C. & A.	1,400	1,573	500	382	1,475	1,577	677	59	7,643
Ill. Cent.	5,573	3,887	1,929	938	2,303	2,057	2,558	327	19,572
Freeport Div. I. C.	17	21	2	6	19	64	29	.....	158
Gal. Div. C. & N. W.	1,056	2,108	59	124	1,902	4,434	5,871	919	16,473
Wis. Div. C. & N. W.	12	10	1	3	3	16	30	7	82
Wabash.	1,850	1,386	753	522	883	839	648	138	7,069
C. & E. I.	744	946	286	230	430	943	335	43	3,957
C., M. & St. P.	209	821	26	74	663	3,770	2,222	612	8,397
Wis. Cent. ....	.....	.....	.....	.....	1	.....	.....	.....	1
Chicago & Great Western.	193	460	23	36	700	2,071	1,167	349	4,999
A., T. & S. Fe.	675	1,445	180	151	1,412	2,835	715	177	7,590
Through and special.	348	1,736	49	119	932	2,098	1,143	108	6,533
Total cars.	16,328	19,773	4,296	3,182	21,510	35,462	22,869	4,100	127,520

EXHIBIT B-4.

Inspection on Arrival—By Railroads.

RAILROADS.	OATS.							TOTAL CARB.	RYE.				TOTAL CARB.
	White.		2	3	White clipped.		Not graded		1	2	3	Not graded	
	2	3			1	2							
C., B. & Q.....	2,480	5,596	1,790	1,800	....	29	92	11,787	..	1,000	635	24	1,659
C., R. I. & P.....	552	6,871	510	1,807	....	26	82	9,848	3	651	267	9	930
C. & A.....	667	906	584	280	....	25	10	2,472	..	81	26	2	109
Ill. Cent.....	2,205	3,686	3,578	1,115	....	9	45	10,638	..	171	92	2	265
Freeport Div. I. C.....	3	202	8	135	....	.....	4	352	..	2	10	....	12
Gal. Div. C. & N.W.	1,395	7,387	929	3,206	....	13	110	13,040	..	476	274	4	754
Wis. Div. C. & N.W.	398	1,352	111	306	3	16	19	2,205	6	205	51	1	263
Wabash.....	471	765	558	876	....	40	21	2,231	..	16	51	4	71
C. & E. I.....	165	585	869	255	....	1	29	1,904	..	52	36	15	103
C. M. & St. P.....	2,197	7,749	1,008	1,963	....	23	66	12,946	..	527	174	5	706
Wis. Cent.....	47	23	9	....	....	1	....	80	..	19	9	1	29
Chic. Great W'st'n.	412	1,670	592	651	....	.....	10	3,335	..	134	69	2	205
A., T. & S. Fe.....	338	1,008	955	259	....	.....	4	2,564	..	114	89	1	204
Through & special..	1,176	1,804	555	473	....	158	46	4,212	..	770	290	16	1,076
Total cars.....	12,506	39,604	12,056	12,566	3	341	538	77,614	9	4,218	2,073	86	6,386

EXHIBIT B-5.

Inspection on Arrival—By Railroads.

RAILROADS.	BARLEY.										TOTAL CARS.	GRAND TOTAL. Cars of all kinds of Grain.
	Seco.	Bay Brew- ing.		Cheva- lier.		2	3	4	5	Not graded		
		3	2	3	2								3
C., B. & Q.						72	1,265	490	132	12	1,971	63,532
C., R. I. & Pacific.			3			4	605	540	126	23	1,301	35,372
C. & A.							5	13		7	25	16,537
Ill. Cent.						10	688	756	13	15	1,482	36,058
Freeport Div. I. C.						2	270	85	4		361	911
Gal. Div. C. & N. W.		2	1		1	41	1,579	1,094	113	25	2,856	38,018
Wis. Div. C. & N. W.			1			87	1,611	1,179	83	179	3,140	6,634
Wabash.						1	3	12			16	11,869
C. & E. I.												8,306
C. M. & St. P.			2		1	115	3,706	1,154	99	88	5,167	37,307
Wis. Cent.	1	5	11			1	31	37	2		88	234
Chicago Great Western.						31	356	342	45	5	779	15,447
A., T., & S. F.		1				3	16	30	2		52	21,408
Through and special.						74	348	80	28	4	534	28,939
Total cars.	1	8	18	2	2	441	10,483	5,812	647	358	17,772	320,572

EXHIBIT C.

Inspection on Arrival—By Canal and Lake—Bushels.

MONTHS.	WINTER WHEAT.					TOTAL BUSH- ELS	SPRING WHEAT.				TOTAL BUSH- ELS
	Hard	Red Winter.					2	3	4	White.	
		3	2	3	4					Not graded		3
November, 1891...											
December, 1891...							60,608				60,608
January, 1892...	14,957					14,957	21,648				21,648
March, 1892...			9,653			9,653					
April, 1892...		4,462				4,462	77,174				77,174
May, 1892...		9,400				9,400	25,323	11,388			36,711
June, 1892...											
July, 1892...	10,982		7,949		5,500	24,431	10,634		6,194	4,516	21,344
August, 1892...		8,713	10,667			19,380	10,644	21,173		4,559	36,376
September, 1892...			2,500	1,500		4,000					
October, 1892...			18,600	2,500		21,100					
Total bushels.	25,939	22,557	49,369	4,000	5,500	107,383	206,031	32,561	6,194	9,075	253,861

*Exhibit C—Continued.**Inspection on Arrival—By Canal and Lake—Bushels.*

MONTHS.	CORN.							TOTAL BUSHELS.	
	Yellow.		White.		2	3	4		Not graded
	2	3	2	3					
November, 1891.....		3,000			4,800		800		8,600
December, 1891.....									
January, 1892.....									
March, 1892.....		13,700			3,000	51,200	3,500		71,400
April, 1892.....		10,000				70,200			80,200
May, 1892.....	4,800	6,100	375		8,400	11,500			31,175
June, 1892.....		16,800				32,200	17,400		66,400
July, 1892.....	1,600	3,400					89,500		94,500
August, 1892.....	7,600	4,000	1,500	1,200	48,600	24,600	36,900	4,200	128,600
September, 1892.....	3,300	184,300					300	6,800	194,700
October, 1892.....	6,500				286,100	8,000			300,600
Total bushels.....	23,800	241,300	1,875	1,200	350,900	197,700	148,400	11,000	976,175

*Exhibit C—Concluded.**Inspection on Arrival—By Canal and Lake—Bushels.*

MONTHS.	OATS.					RYE.				GRAND TOTAL BUSHELS.
	White.		2	3	Total bush- els.	2	3	Not graded	Total bush- els.	
	2	3								
November, 1891....	.....	75,500	30,000	.....	105,500	10,800	.....	.....	10,800	124,900
December, 1891....	.....	.....	.....	.....	.....	12,023	.....	.....	12,023	72,631
January, 1892.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36,605
March, 1892.....	.....	18,700	3,000	.....	21,700	.....	22,096	.....	22,096	124,849
April, 1892.....	15,652	32,100	15,100	8,000	70,852	3,920	.....	.....	3,920	236,608
May, 1892.....	9,000	95,900	30,125	14,000	149,025	2,200	.....	.....	2,200	228,511
June, 1892.....	6,000	85,300	11,500	.....	102,800	175	.....	.....	175	169,375
July, 1892.....	10,500	18,100	27,300	.....	55,900	8,514	.....	.....	8,514	204,689
August, 1892.....	13,000	108,443	24,700	3,300	149,443	4,000	.....	.....	4,000	337,799
September, 1892 ..	4,000	15,500	22,500	.....	42,000	.....	1,000	.....	1,000	241,700
October, 1892.....	.....	11,500	.....	5,500	17,000	.....	.....	.....	.....	338,700
Total bushels..	58,152	461,043	164,225	30,800	714,220	37,632	26,096	1,000	64,728	2,116,367

EXHIBIT D—1.

Inspection from Store—Regular Elevators.

MONTHS.	WINTER WHEAT.	SPRING WHEAT.	CORN.	OATS.	RYE.	BARLEY.	TOTALS.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
November, 1891..	1,872,471	1,087,559	2,976,420	1,687,817	542,172	893,286	9,059,725
December, 1891..	686,524	544,570	1,425,406	1,077,722	380,486	193,074	4,307,782
January, 1892...	216,428	655,097	1,399,679	533,078	132,439	21,609	2,958,330
February, 1892...	519,447	444,238	493,357	286,728	129,962	15,129	1,888,861
March, 1892.....	597,351	737,462	1,270,277	289,105	212,759	73,389	3,180,343
April, 1892.....	626,289	2,554,837	3,046,422	1,302,621	182,677	83,207	7,796,053
May, 1892.....	512,835	2,362,759	4,118,677	1,416,492	262,403	21,556	8,694,722
June, 1892.....	715,055	2,213,156	5,622,594	2,086,711	112,408	1,305	10,751,229
July, 1892.....	1,771,706	2,833,117	4,628,395	2,065,948	77,512	907	11,377,585
August, 1892.....	4,612,632	1,122,533	5,203,611	1,850,315	49,363	990	12,839,444
September, 1892..	4,378,858	490,202	7,767,831	1,408,781	106,383	35,174	14,187,229
October, 1892....	2,919,304	484,060	6,497,652	1,040,215	49,655	502,307	11,493,253
Totals.....	19,428,900	15,529,590	44,450,321	15,045,533	2,238,219	1,841,993	98,534,556

EXHIBIT D—2.

Inspection, on Board Lake Vessels, of Grain Loaded from Un-licensed Elevators.

MONTHS.	WINTER WHEAT.	SPRING WHEAT.	CORN.	OATS.	RYE.	BARLEY.	TOTALS.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
November, 1891..	98,915	29,965	.....	428,313	.....	7,649	564,842
December, 1891..	50,266	4,540	.....	.....	.....	.....	54,806
January, 1892....	7,528	30,946	.....	.....	.....	.....	38,474
February, 1892..	9,646	.....	.....	.....	.....	.....	9,646
March, 1892.....	.....	62,000	.....	.....	.....	.....	62,000
April, 1892.....	10,454	406,275	75,983	154,235	.....	.....	646,947
May, 1892.....	.....	14,442	86,161	758,362	.....	.....	858,965
June, 1892.....	.....	67,490	219,152	580,714	.....	.....	867,356
July, 1892.....	.....	65,113	308,884	930,064	.....	.....	1,304,061
August, 1892....	177,216	104,475	360,301	358,144	.....	.....	1,000,136
September, 1892.	942,624	41,127	229,443	380,863	55,000	.....	1,649,057
October, 1892....	1,253,673	412,809	419,620	208,171	32,500	.....	2,326,773
Totals.....	2,550,322	1,239,182	1,699,544	3,798,866	87,500	7,649	9,383,063

EXHIBIT E.

Financial Statement.

MONTHS.	Inspection Fees Earned.	Commissions paid Rail- roads and Elevators.	Total Cash Received.	Disburse- ments for Expenses.	Bank Balances.
November, 1891..	\$13,470 34	\$609 24	\$12,851 38	\$10,557 83	\$57,915 40
December, 1891..	8,575 66	594 11	12,583 54	10,178 15	60,320 79
January, 1892....	5,474 45	385 49	8,435 86	10,450 11	58,308 54
February, 1892....	5,442 24	227 20	5,009 00	10,328 57	52,988 97
March, 1892.....	6,750 90	224 87	4,908 59	9,978 41	47,919 15
April, 1892.....	8,088 64	275 16	6,143 96	10,011 25	44,051 86
May, 1892.....	9,356 23	341 52	7,882 76	10,376 17	41,558 45
June, 1892.....	12,937 62	406 07	9,453 06	10,054 71	40,956 80
July, 1892.....	12,374 51	583 01	12,430 59	10,050 93	43,336 46
August, 1892....	16,285 66	541 43	12,064 37	10,140 09	45,260 74
September, 1892..	18,590 29	702 65	15,143 92	10,363 67	50,040 99
October, 1892.....	17,301 76	840 51	17,103 97	10,838 43	56,306 53
Totals	\$154,628 30	\$5,725 26	\$124,013 00	\$123,828 32	.....

P. Bird Price, Chief Inspector,

IN ACCOUNT WITH ILLINOIS STATE GRAIN INSPECTION DEPARTMENT.

November 1, 1892.	To balance on hand, as per last report.....	\$55,621 85	.....
October 31, 1892..	To cash received during the year, as shown above.	124,013 00	.....
October 31, 1892..	By expenses Inspection Department.....		\$100,820 89
October 31, 1892..	By expenses Registration Department.....		17,701 48
October 31, 1892..	By expenses Committee of Appeals.....		4,805 95
October 31, 1892..	By balance on hand.....		56,306 53
	Totals.....	\$179,634 85	\$179,634 85

EXHIBIT F.

INSPECTION ON ARRIVAL—Comparative Statement of Inspection from 1880 to 1892, inclusive.

YEAR.	CARS.		WINTER WHEAT.		SPRING WHEAT.		CORN.		OATS.		RYE.		BARLEY.		TOTAL.	
	Number.	Number.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1880.....	270,524	1,022	5,887,500	17,312,958	91,185,379	18,873,400	1,645,545	8,991,576	138,896,368							
1881.....	227,119	950	1,682,311	18,398,187	76,017,132	22,612,368	1,221,843	4,177,762	124,109,693							
1882.....	171,218	697	11,157,238	9,508,301	45,775,863	25,069,350	1,083,377	5,893,894	99,083,953							
1883.....	235,213	477	6,953,691	13,910,095	72,258,580	33,352,184	3,732,180	6,824,316	137,418,846							
1884.....	210,822	351	7,163,624	16,782,273	54,600,598	39,593,860	3,732,180	6,824,316	128,618,362							
1885.....	212,270	460	2,354,818	24,024,672	56,709,685	38,859,040	1,798,951	8,032,761	151,773,960							
1886.....	201,103	450	5,506,084	10,644,814	68,477,686	42,534,082	1,104,396	10,262,360	131,527,452							
1887.....	189,130	503	5,639,573	17,667,973	50,700,475	45,974,724	852,324	9,462,000	130,257,069							
1888.....	211,818	341	7,265,135	10,191,031	66,391,548	52,617,987	2,570,410	8,521,344	117,314,810							
1889.....	219,888	362	13,695,185	4,654,590	84,775,590	58,768,512	2,570,410	9,206,163	173,670,447							
1890.....	272,956	610	9,126,046	9,320,484	94,991,620	74,605,342	3,085,129	13,378,080	204,506,701							
1891.....	277,218	422	27,793,776	15,127,138	68,283,523	75,404,372	8,185,375	11,042,163	205,886,347							
1892.....	320,572	389	34,223,568	22,659,996	86,159,535	85,779,164	3,972,960	13,951,020	246,726,243							

EXHIBIT G.

INSPECTION FROM STORE—Comparative Statement of Out-Inspection from 1883 to 1892, inclusive.

YEAR.	WINTER WHEAT.	SPRING WHEAT.	CORN.	OATS.	RYE.	BARLEY.	TOTAL.	COMBINED TOTALS OF IN AND OUT- INSPECTION.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1883	5,201,903	5,854,521	52,391,148	6,415,537	3,190,923	744,086	73,797,578	211,216,444
1884	4,441,400	12,996,124	30,667,783	6,621,698	2,037,022	1,296,691	58,880,778	187,479,140
1885	1,501,665	7,715,030	31,661,591	3,065,637	738,209	296,790	45,578,922	177,358,882
1886	2,618,956	10,500,918	41,645,620	4,765,724	685,174	1,052,913	61,249,305	192,778,757
1887	6,019,271	17,642,628	39,843,323	10,153,370	394,948	1,044,871	73,698,411	295,335,480
1888	3,060,541	6,395,790	46,754,284	14,818,254	516,942	1,157,543	72,673,334	217,890,263
1889	9,156,010	3,637,232	66,517,282	20,688,531	1,778,821	1,899,573	103,156,949	276,827,396
1890	4,108,468	4,090,471	57,285,534	16,839,843	1,753,839	1,753,839	85,744,408	290,251,109
1891	23,127,995	8,048,566	41,218,563	14,161,975	5,573,007	2,073,177	94,260,883	300,046,230
1892	21,979,222	16,768,772	46,149,865	18,844,499	2,325,719	1,819,612	107,917,619	354,413,862

REPORT OF WAREHOUSE REGISTRAR.

OFFICE OF WAREHOUSE REGISTRAR,
CHICAGO, ILL., November 1, 1892.

Hon. Isaac N. Phillips. Chairman Railroad and Warehouse Commission, Springfield, Ill.:

DEAR SIR:—I have the honor to submit herewith tables showing fully the business transacted in this office during the year ended October 31, 1892. These tables show the entire business of this office so fully and clearly that I deem it unnecessary to make special reference to any one of them.

The amount of grain received and shipped has been unusually large—amounting in the aggregate, received 109,868,202 bushels, and 99,817,131 bushels shipped.

It gives me pleasure to state that the warehouse men and dealers in grain, transacting business at this office, have all shown a commendable disposition to comply with the laws of the State governing their business; and that so far as is known they have been fairly and justly dealt with. I have no violations of the law to report, and shall make no recommendation as to changes.

The chief clerk of this office, A. C. Oldenburg, has discharged his duties faithfully and with ability, and has shown remarkable efficiency in his work.

The entire clerical force has ably seconded his efforts in maintaining the efficiency of this office, and richly deserve any commendation that is in my power to give.

Respectfully,

JOHN M. TURNBULL,
Warehouse Registrar.

EXHIBIT A—1.
Receipts into Store—Winter Wheat by Rail.

Warehouses.	2 White.	3 White.	4 White.	1 Hard.	2 Hard.	3 Hard.	2 Red.	3 Red.	4 Red.	No. Grade.	Total.
Armour A, B, C and D.....	2,234	2,961	.....	38,022	1,698,553	496,192	487,156	442,536	127,432	.....	3,235,026
Central A and B.....	1,519	2,639	.....	2,296	1,357,733	114,752	777,546	756,789	80,460	1,940	2,099,036
Santa Fe.....	.....	1,038	1,262	583	1,467,435	1,426,013	482,614	725,314	317,551	2,319	4,493,967
Wabash and Indiana.....	6,279	8,542	2,752	.....	1,07,847	423,073	802,469	2,048,170	159,834	10,924	3,575,390
Alton.....	.....	.....	.....	.....	140,681	233,850	223,409	647,867	44,267	.....	1,978,791
Rock Island A.....	.....	3,549	.....	1,644	313,448	389,103	233,879	283,368	44,267	.....	1,538,848
Rock Island B.....	.....	.....	.....	.....	42,298	117,067	.....	3,255	6,226	.....	168,846
St. Louis and National.....	.....	14,605	2,519	.....	205,232	441,191	170,223	1,177,596	98,632	16,820	2,126,818
Pacific B.....	.....	.....	.....	.....	331,508	83,734	548	.....	.....	.....	475,790
Illinois River.....	.....	1,667	7,086	1,034	47,178	26,616	.....	.....	.....	.....	73,794
Neely.....	.....	.....	.....	.....	31,362	40,697	11,077	58,302	154,209	35,940	341,274
Air Line, Galena, Iowa, Fulton, City Union and St. Paul.....	1,679	433	.....	6,913	928,469	1,855,955	144,089	224,343	96,113	1,852	3,259,846
Danville.....	.....	.....	.....	.....	.....	4,177	2,017	4,967	3,451	.....	14,612
Totals.....	11,711	38,434	13,619	50,942	5,731,744	5,084,280	3,385,027	6,379,007	1,088,575	75,479	22,468,438

See Exhibit A—8.

Winter Wheat by Canal.

Warehouses.	2 Hard.	3 Hard.	2 Red.	3 Red.	4 Red.	No. Grade.	Total.
Armour A, B and D.....	6,020	4,020	.....	43,748	24,325	.....	78,113
St. Louis.....	.....	.....	9,362	.....	11,836	.....	21,198
Neely.....	.....	.....	.....	.....	.....	5,331	5,331
Indiana.....	.....	.....	.....	3,339	.....	.....	3,339
Alton.....	86,589	20,479	79,567	126,145	.....	6,084	318,864
City.....	17,741	42,534	9,303	9,628	1,555	1,052	81,813
Totals.....	110,350	67,033	98,232	182,860	37,716	12,467	508,658

Shipments—Winter Wheat.

Warehouses.	2 White.	3 White.	4 White.	1 Hard.	2 Hard.	3 Hard.	2 Red.	3 Red.	4 Red.	No grade.	3 Turk- ish.	Total.
Armour A. B. C and D.....	3,850	7,533	1,972	49,963	2,000,640	509,609	209,609	477,244	178,199	557	.....	3,550,176
Central A and B.....	.....	3,126	785	2,296	295,639	18,616	552,529	607,629	32,174	1,040	.....	1,513,234
Santa Fe.....	.....	1,032	387	583	1,439,091	1,406,001	248,281	618,369	326,572	2,721	.....	4,043,043
Wabash and Indiana.....	1,542	1,914	2,294	.....	96,580	418,147	536,796	1,632,250	170,262	.....	.....	2,858,765
Alton.....	.....	.....	.....	.....	145,079	280,329	134,194	651,028	5,043	6,084	.....	1,221,757
Rock Island A.....	.....	2,404	2,712	.....	190,658	451,998	292,414	216,262	73,829	.....	1,936	1,132,557
Rock Island B.....	.....	.....	.....	.....	42,890	29,620	3,702	13,603	2,078	.....	.....	91,893
St. Louis and National.....	429	5,073	2,515	.....	145,715	317,248	78,819	666,918	103,187	16,820	.....	1,366,724
Pacific B.....	.....	.....	.....	.....	116,015	4,650	.....	.....	.....	.....	.....	120,665
Illinois River.....	.....	.....	.....	.....	.....	.....	337	.....	.....	.....	.....	337
Neely.....	.....	1,681	6,424	1,034	22,445	39,318	5,398	2,516	151,746	35,121	.....	265,683
Air Line, Galena and Iowa City, Union, Fulton and St. Paul.....	1,679	.....	1,005	4,685	824,762	1,735,579	85,556	248,380	112,601	.....	.....	3,014,247
Danville.....	.....	.....	.....	.....	.....	4,177	2,017	4,967	3,451	.....	.....	14,612
Totals.....	7,500	22,769	18,004	58,561	5,318,314	5,295,292	2,129,652	5,139,106	1,159,142	63,290	1,993	19,213,713

EXHIBIT A—2,
Receipts into Store—Spring Wheat by Rail.

Warehouses.	2 Hard.	1	2	3	4	No grade.	2 White.	3 White.	2 Mixed.	3 Mixed.	Total.
Armour A, B, C and D.	.....	.....	2,424,069	1,675,160	98,231	100,333	14,082	423,280	1,006	3,440	4,740,201
Central A and B.	.....	.....	211,950	180,380	6,978	.....	.....	714	.....	.....	400,022
Santa Fe.	.....	.....	249,205	13,673	.....	.....	.....	.....	.....	.....	262,878
Wabash and Indiana.	432	.....	195,159	91,954	16,389	.....	.....	1,200	.....	.....	305,134
Alton.	.....	.....	1,538,717	211,232	6,566	.....	.....	127,475	.....	.....	1,883,990
Rock Island A.	.....	.....	105,028	53,686	11,584	.....	1,837	220,291	.....	.....	401,426
Rock Island B.	.....	.....	1,510	1,446	.....	.....	.....	.....	.....	.....	2,956
St. Louis and Natic.	.....	691	280,418	129,388	2,399	.....	.....	56,274	.....	.....	469,170
Pacific B.	.....	.....	583,660	194,678	.....	.....	621	413	.....	601	779,973
Illinois River.	.....	.....	37,562	113,010	458	.....	.....	9,225	.....	.....	160,255
Neely.	.....	.....	2,589	272,470	297,777	5,366	2,638	37,994	1,231	7,090	627,155
Air Line, Gal., Ia., Fulton City, Union & St. P.	600	.....	2,678,950	853,654	123,792	2,214	.....	37,705	.....	1,741	3,698,656
Total	1,032	691	8,308,817	3,790,731	564,174	107,913	19,778	923,571	2,237	12,872	13,731,816

See Exhibit A—8.

Spring Wheat by Canal.

Warehouses.	2	3	4	3 White....	2 Mixed....	3 Mixed....	No Grade...	Total.
Armour A, B and D	160,538	11,646	.....	.....	.....	.....	.....	172,184
Neely .....	.....	9,974	5,831	.....	.....	.....	22,472	38,277
Alton	302,913	81,537	6,566	109,555	.....	.....	.....	500,571
City	320,456	69,935	2,431	.....	3,504	1,675	.....	398,001
Total	783,907	173,092	14,828	109,555	3,504	1,675	22,472	1,109,033

Shipments—Spring Wheat.

WAREHOUSES.	2 Hard.	1	2	3	4	No Grade.	2 White.	3 White.	3, Mixed.	Total.
Armour—A, B, C and D.....	.....	.....	2,859,457	2,357,875	137,163	34,906	8,303	503,539	12,020	5,892,863
Central—A and B.....	.....	.....	258,929	132,846	6,978	.....	.....	.....	.....	398,753
Santa Fe.....	.....	.....	249,205	15,048	.....	.....	.....	.....	.....	254,253
Wabash & Indiana.....	432	.....	180,233	73,338	16,124	.....	.....	1,200	.....	271,527
Alton.....	.....	.....	1,907,762	282,976	6,566	.....	.....	140,374	.....	2,337,678
Rock Island—A.....	.....	.....	270,293	58,403	10,151	.....	3,712	202,397	.....	544,566
Rock Island—B.....	.....	.....	436	1,446	.....	.....	.....	.....	.....	1,882
St. Louis & National.....	.....	473	310,675	129,385	1,920	.....	.....	56,915	.....	499,377
Pacific—B.....	.....	.....	772,719	174,554	.....	.....	.....	.....	.....	949,136
Illinois River.....	.....	.....	48,096	98,652	458	.....	.....	21,064	468	168,788
Neely.....	.....	.....	2,589	900,958	297,281	27,564	2,696	22,303	8,323	621,656
Air Line, Galena, Iowa, Fulton City, Union and St. Paul	1,773	.....	3,256,595	926,452	128,519	2,259	.....	34,281	1,544	4,345,333
Total.....	2,205	473	10,040,499	4,521,396	605,169	64,669	16,574	982,073	22,354	16,235,952

EXHIBIT A-3.

Receipts Into Store—Corn by Rail.

Warehouses.	² Yellow.	³ Yellow.	² White.	³ White.	2	3	4	New. 2	No grade.	Total.
Armour A, B, C, D, E and F.....	2,255,307	2,266,029	194,969	72,247	4,608,617	6,816,840	879,373	298,020	92,784	17,544,186
Central A and B.....	2,714,062	1,063,019	968,129	139,553	1,107,775	659,604	285,649	207,515	20,068	7,255,374
Santa Fe.....	351,957	531,169	75,613	19,605	717,235	1,303,475	15,728	172,391	.....	3,187,173
Wabash & Indiana.....	1,888,570	780,427	562,581	78,122	745,990	585,742	249,411	112,511	1,812	4,505,166
Atton.....	5,965	.....	.....	.....	36,121	1,041	.....	.....	.....	.....
Rock Island A.....	312,708	383,623	15,642	.....	1,005,818	1,397,879	91,614	14,373	.....	48,127
Rock Island B.....	313,323	177,566	37,218	.....	1,719,585	856,143	31,454	3,512	.....	3,256,087
St. Louis.....	580,426	300,307	191,596	9,927	1,605,255	908,923	31,475	40,344	.....	3,125,001
Neely.....	24,079	8,778	7,207	4,190	374,947	283,033	246,925	33,932	.....	2,067,633
Galena, Iowa, Fulton, City, Union & St. Paul	647,779	900,085	41,849	19,456	1,634,937	3,241,016	992,545	107,455	137	1,034,495
Danville.....	1,395	25,310	.....	1,365	.....	134,763	521	16,209	.....	7,634,759
Total.....	8,655,771	6,441,308	2,094,304	344,465	12,726,260	15,587,859	2,810,725	1,006,262	213,210	49,880,164

See Exhibit A-8.

Corn by Canal.

Warehouses.	2 Yellow.	3 Yellow.	2	3	4	Total.
Armour, A, B and D.....	10,288	10,241	427,879	58,593	15,977	522,978
St. Louis.....	7,718	29,076	49,447	83,141	137,569	306,951
Neely.....			29,396		7,718	37,114
Indiana.....	10,790	36,729	1,697	23,049		72,265
Alton.....			10,417			10,417
City.....				16,258		16,258
Total.....	28,796	76,046	518,836	181,041	161,264	965,983

Shipments—Corn.

Warehouses.	² Yellow.	³ Yellow.	² White.	³ White.	2	3	4	² New.	No grade.	Total.
Armour A, B, C, D, E & F	1,920,950	2,259,567	164,241	60,372	3,626,534	6,716,378	873,649	298,020	92,784	16,012,305
Central A and B.....	2,414,115	1,059,290	782,986	132,979	781,863	635,097	285,231	206,617	20,068	6,318,216
Santa Fe.....	358,204	518,081	76,472	18,894	643,669	1,302,199	14,979	172,991	.....	3,104,889
Wabash & Indiana.....	1,468,877	684,692	851,939	57,818	447,299	518,841	180,066	112,511	1,247	3,407,780
Atton.....	5,965	.....	.....	.....	25,019	1,041	.....	.....	.....	32,025
Rock Island A.....	334,861	378,245	17,215	.....	892,763	1,876,399	91,644	11,238	.....	3,102,368
Rock Island B.....	340,025	161,098	27,482	.....	1,501,448	801,516	11,737	3,512	.....	2,846,718
St. Louis.....	528,569	324,231	169,280	9,927	567,845	380,783	167,094	40,344	.....	2,188,043
Illinois River.....	.....	.....	.....	.....	6,326	.....	.....	.....	.....	6,326
Neely.....	716	8,486	.....	.....	379,779	274,149	247,680	33,932	117,462	1,065,805
Galena, Iowa.....	.....	.....	.....	3,601	.....	.....	.....	.....	.....	.....
City, Union & St. Paul.....	532,606	882,613	16,872	17,154	1,041,749	3,209,386	929,812	107,455	362	6,738,009
Danville.....	1,395	26,496	505	1,365	677	134,763	521	16,209	.....	181,930
Totals.....	7,496,286	6,302,798	1,607,012	302,110	9,914,371	15,344,952	2,802,353	1,002,229	231,923	45,004,534

EXHIBIT A-4.

Receipts into Store—Oats by Rail.

Warehouses.	2 White.	3 White.	2	3	No Grade.	2 White Clipped.	Total.
Armour A. B. C. D and E...	499,286	2,027,509	1,410,218	191,388	1,809	2,443	4,132,653
Central A and B.....	517,273	1,039,129	2,191,166	269,746		2,208	4,019,522
Santa Fe.....	129,818	405,518	438,099	30,514			1,003,949
Wabash and Indiana.....	137,858	345,941	897,026	47,594		3,058	1,431,477
Alton.....	373,968	75,299	105,102	5,416			559,785
Rock Island A.....	26,565	1,616,956	183,227	178,771		31,755	2,037,274
Rock Island B.....	1,316	253,741	40,816	54,542			350,415
St. Louis and National.....	199,731	155,965	196,338				552,034
Illinois River.....		12,682					12,682
Neely.....		16,417	4,030	4,567	465	2,058	27,537
Pacific B.....	155,729						155,729
Danville.....	1,037	113,231		74,081			188,349
Galena, Iowa, City, Union and St. Paul.....	39,125	761,084	913,585	66,531			1,780,325
Total.....	2,081,706	6,823,472	6,379,607	923,150	2,274	41,522	16,251,731

Oats by Canal.

Warehouses.	2 White.	3 White.	2	3	2 White Clipped.	Total.
Armour A, B and D.....	18,473	171,987	76,355			266,815
St. Louis.....	17,422	191,605	53,300	1,658	7,169	271,154
Indiana.....	3,423	13,812	25,785			43,020
Alton.....	57,389	12,415	103,902	5,416		179,122
City.....		15,162	8,135	1,917		25,214
Total.....	96,707	404,981	267,477	8,991	7,169	785,325

Shipments—Oats.

Warehouses.	2 White.	3 White.	2	3	No grade.	2 White Clipped.	Total.
Armour, A. B. C. D and E.	588,789	2,265,979	1,072,536	135,144	2,266	2,443	4,067,157
Central A and B.....	530,445	1,051,481	4,698,467	223,001		2,208	3,505,602
Santa Fe.....	130,960	427,066	331,111	33,231			922,368
Wabash and Indiana.....	163,230	347,613	723,139	36,529		3,058	1,273,569
Alton.....	431,356	86,680	85,175	5,416			608,627
Rock Island A.....	46,632	1,673,904	91,967	184,450		31,755	2,028,708
Rock Island B.....	1,316	253,423	30,600	54,542			339,881
St. Louis and National.....	111,184	255,108	190,749	1,658			558,699
Illinois River.....		12,682					12,682
Neely.....							
Pacific B.....	155,729		8,642				164,371
Danville.....	1,880	228,120	1,550	86,193			317,743
Galena, Iowa, City, Union and St. Paul.....	40,916	672,343	648,283	67,007			1,428,549
Total.....	2,202,437	7,274,399	4,882,219	827,171	2,266	39,464	15,227,956

EXHIBIT A—5.

Receipts into Store—Rye by Rail.

Warehouses.	1	2	3	Total.
Armour, A, B, C and D.....		677,749	244,802	922,551
Central A and B.....		147,265	12,114	159,379
Santa Fe.....		56,796	4,362	61,158
Wabash and Indiana.....		64,930	35,599	100,529
Alton.....		216,620	5,542	222,162
Rock Island A.....	473	281,320	11,811	293,604
Rock Island B.....		46,707	629	47,336
St. Louis.....		22,697	2,451	25,148
Neely.....		11,666	20,609	32,275
Danville.....		575	75,165	75,740
Galena, Iowa, Fulton, City, Union and St. Paul.....	1,276	281,728	36,990	319,994
Total.....	1,749	1,808,053	450,074	2,259,876

Rye by Canal.

Warehouses.	2	3	No grade.	Total.
Armour, A, B and D.....		24,272	1,228	25,500
St. Louis.....		3,680		3,680
Alton.....	33,055			33,055
City.....	4,082	5,687		9,769
Total.....	37,137	33,639	1,228	72,004

Shipments—Rye.

Warehouses.	1	2	3	No grade.	Total.
Armour A, B, C and D.....		648,283	267,819	3,976	920,078
Central A and B.....		159,101	6,046		165,147
Santa Fe.....		60,530	8,190		68,720
Wabash and Indiana.....		62,716	10,670		73,386
Alton.....		248,903	5,542		254,445
Rock Island A.....	473	279,149	11,378		291,000
Rock Island B.....		18,176	629		18,805
St. Louis.....		37,668	6,009		43,677
Illinois River.....		4,301			4,301
Danville.....		575	75,165		75,740
Galena, Iowa, Fulton, City, Union & St. Paul.....	1,276	287,337	34,227		322,840
Total.....	1,749	1,806,739	425,675	3,976	2,238,139

EXHIBIT A—6.

RECEIPTS INTO STORE—*Barley by Rail.*

Warehouses.	2	3	4	5	No grade.	Total.
Armour A, B, C, D and E.....	40,128	57,183	62,222	42,855	2,828	205,216
Central B.....		108,925	15,013			123,938
Rock Island A.....		15,933	635			16,568
Rock Island B.....	876	5,289				6,165
St. Louis.....		1,855				1,855
Galena, Iowa, City, Union & St. Paul	50,926	1,212,594	200,963	10,534	1,315	1,476,332
Pacific B.....	6,892					6,892
Total.....	98,822	1,401,779	273,873	53,389	4,143	1,836,966

Shipments—Barley.

Armour A, B, C, D and E.....	14,249	53,986	63,935	43,894	2,828	178,892
Central B.....		117,893	15,013			132,906
Rock Island A.....		15,064		635		15,699
Rock Island B.....		1,172				1,172
St. Louis.....		1,855				1,855
Galena, Iowa, City, Union & St. Paul	98,789	1,211,623	202,351	9,676	1,315	1,523,754
Pacific B.....	22,559					22,559
Total.....	135,597	1,401,593	281,299	54,205	4,143	1,876,837

EXHIBIT A—7.

GRAND TOTALS.

Warehouses.	Receipts by canal.	Receipts by rail.	Shipments.
Armour A, B, C, D, E and F.....	1,065,590	30,839,833	30,621,561
Central A and B.....		14,057,271	12,003,888
Santa Fe.....		8,938,525	8,393,273
Wabash and Indiana.....	118,624	9,917,696	7,884,847
Alton.....	1,042,029	3,987,855	4,454,532
Rock Island A.....		7,341,407	7,135,288
Rock Island B.....		3,700,719	3,300,351
St. Louis & National.....	602,983	5,242,658	4,658,375
Illinois River.....		246,731	192,384
Neely.....	80,722	2,109,736	1,953,144
Pacific B.....		1,418,984	1,256,731
Danville.....		458,264	590,025
Air Line, Galena, Iowa, Fulton, City, Union & St. Paul.....	531,115	18,168,060	17,372,732
Total.....	3,441,063	106,727,139	99,817,131
Grand total of receipts.....		109,868,202	

EXHIBIT A-8.

Showing the Amount of Grain Transferred from One Warehouse to Another.

From.	To.	3 Red.	4 Red.	No G. Red.	2 Hard.	3 Hard.	2 Spring.	3 Spring.	4 Spring.	3 Mixed.	3 Yellow Corn.	3 Corn.	4 Corn.
Armour A and B.....	Armour D.....	4,946											
Armour D.....	Armour A and B.....		9,364			3,928	456,044	255,566			8,594		
Armour F.....	Armour E.....												3,305
St. Louis.....	Armour A and B.....		31,010										
Rock Island A.....	St. Louis.....		12,166									73,000	
City.....	Fulton.....		1,559										
Illinois River.....	Armour A and B.....			1,852	6,020								
Illinois River.....	Fulton.....				17,741	38,683	670	12,006	2,439	6,111			
Total		4,946	54,099	1,852	23,761	42,611	456,714	270,636	2,439	6,111	8,594	73,000	3,305

NOTE—The amount of grain, as shown in this exhibit, is included in the receipts and shipments.

EXHIBIT A—9.

Showing the Number of Cars of each kind of Grain Received into the several Public Warehouses.

Warehouses.	Winter.	Spring.	Corn.	Oats.	Rye.	Barley.	Total.
Armour A. B. C. D. E & F.	7,561	7,722	25,591	3,765	1,521	219	46,379
Central A and B	3,523	546	11,597	3,772	263	176	19,877
Santa Fe.....	6,822	484	4,745	900	115	.....	13,066
Wabash and Indiana.....	5,574	456	7,140	1,360	156	.....	14,686
Alton.....	1,821	2,444	67	428	280	.....	5,040
Rock Island A.....	2,175	630	5,080	1,828	503	1	10,217
Rock Island B.....	320	5	4,980	316	71	9	5,701
St. Louis and National...	3,375	808	3,348	501	42	3	8,077
Illinois River.....	119	255	.....	.....	.....	.....	374
Neely.....	531	959	1,155	22	45	.....	2,712
Pacific B.....	762	975	.....	110	9	4	1,860
Danville	26	176	262	173	139	.....	776
Air Line, Gal. & Iowa, Ful- ton City, Union & St. P.	4,619	5,798	10,774	1,653	547	1,929	25,320
Total	37,228	21,258	74,739	14,828	3,691	2,341	154,085

EXHIBIT B.

Showing the Number of Cars and Canal Boats from which Grain was received into the several Public Warehouses of Chicago during the year ending October 31, 1892, and the number of said Cars, and Canal Boats, Warehouse Receipts for the contents of which have not been Registered.

Names of Firms.	Number of Warehouses	Names of Warehouses.	NUMBER RECEIVED.		NUMBER NOT REGISTERED.	
			Cars	Canal boats	Cars	Canal boats
Armour Elevator Co.....	6	Armour A. B. C. D. E and F	46,379	335	217	4
Central Elevator Co.....	2	Central A and B.....	19,877	.....	159	.....
The City of Chicago Grain Elevators (Limited).....	7	Air Line, Galena, Iowa, Fulton, City, Union and St. Paul.	25,320	111	809	.....
Chas. Counselman & Co	1	Rock Island A.....	10,217	.....	105	.....
Chicago Elevator Co.....	2	Wabash and Indiana.....	14,686	22	68	.....
National Elevator and Dock Co	2	National and St. Louis.....	8,077	110	88	.....
Chicago and Pacific Elevator Co	1	Pacific B.....	1,860	.....	74	.....
Santa Fe Elevator and Dock Co	1	Santa Fe.....	13,066	.....	250	.....
Geo. A. Seaverns	1	Alton.....	5,040	200	.....	.....
Illinois River Elevator Co.....	1	Illinois River	5,374	2	.....	.....
Illinois Trust and Savings Bank	1	Neely	2,712	16	112	.....
A. C. Davis & Co.....	1	Rock Island B	5,701	.....	19	.....
W. P. Harvey & Co	1	Danville	5,776	.....	8	.....
Total.....	27	.....	154,085	796	1,909	4

EXHIBIT C.

Showing the Number and Disposition of Appeals from the Decision of the Grain Inspection Department to the Committee of Appeals, during the year ending October 31, 1892.

DATE.	INSPECTION SUSTAINED.					INSPECTION CHANGED.						
	Wheat.	Corn.	Oats.	Rye.	Barley.	Total.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total.
November, 1891.....	31	4	.....	.....	.....	35	20	19	.....	.....	.....	40
December, 1891.....	11	24	.....	.....	.....	37	29	55	.....	.....	.....	85
January, 1892.....	4	3	4	2	.....	11	4	.....	1	.....	.....	5
February, 1892.....	3	.....	.....	.....	.....	3	2	.....	.....	.....	.....	3
March, 1892.....	10	8	.....	.....	.....	18	5	1	.....	.....	.....	8
April, 1892.....	1	7	3	1	.....	12	.....	2	1	.....	.....	8
May, 1892.....	2	117	1	.....	.....	120	2	78	2	.....	1	10
June, 1892.....	2	32	.....	.....	.....	34	3	18	3	.....	.....	81
July, 1892.....	17	5	.....	.....	.....	23	12	7	3	.....	.....	24
August, 1892.....	78	10	1	1	.....	92	28	7	3	2	.....	38
September, 1892.....	33	.....	3	3	.....	40	17	2	2	.....	.....	22
October, 1892.....	98	1	4	3	.....	106	85	1	1	2	.....	89
Totals.....	290	211	16	14	.....	531	207	197	18	6	1	429

NOTE.—In addition to the above cars there were 6 canal boats of corn sustained; 2 canal boats of corn changed; 2 canal boats of oats changed.

EXHIBIT D.

A Comparative Statement of the Amount of Grain Annually Received into Store by the Public Warehouses of Chicago, from 1883 to 1892, both inclusive, and of the Number of Cars, Canal Boats and Vessels from which such Grain was received; also, the Number of Bushels shipped from the Public Warehouses during said time.

	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Bushels received.....	78,724,751	57,550,974	51,175,511	62,022,522	68,543,828	78,505,602	98,635,862	86,015,478	93,626,654	109,868,202
Bushels shipped.....	73,367,290	59,432,864	46,178,593	61,747,078	75,754,811	73,708,947	101,706,230	85,895,990	94,027,521	99,817,131
Number of cars.....	143,946	103,233	90,404	103,597	108,402	119,614	148,534	125,502	140,941	154,185
Number of canal boats.....	464	357	467	506	522	319	465	439	331	796
Number of vessels.....	10	1	.....	1	.....	1	.....	6	.....	.....

A Statement Comparing the Number of Cars Annually Inspected on Track, from 1883 to 1892, both inclusive, with the Number received in Store during the same Years.

	1-83.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Inspection on track.....	235,213	210,822	212,270	201,103	189,130	211,818	249,883	272,656	277,216	320,572
Received into store.....	143,946	103,233	90,404	103,957	108,402	119,614	148,534	125,502	140,941	151,085
Inspected, but not stored.....	91,267	107,589	121,866	97,146	80,728	92,174	101,219	147,454	136,275	166,487

EXHIBIT E.

Storage Capacity of Chicago Elevators of Class A, at Date of this Report.

Names of Elevators.	Grain received from—	Capacity— Bushels.
Armour A.....	Chicago, Milwaukee & St. Paul.....	1,250,000
“ B.....	Chicago, Burlington & Quincy.....	1,250,000
“ C.....	Chicago, Burlington & Quincy.....	1,500,000
“ D and annex.....	Chicago, Burlington & Quincy.....	2,500,000
“ E.....	Chicago, Burlington & Quincy.....	1,200,000
“ F.....	Chicago, Burlington & Quincy.....	750,000
Central A.....	Illinois Central.....	1,000,000
“ B.....	Illinois Central.....	1,500,000
Santa Fe.....	Atchison, Topeka, Santa Fe & California.....	1,500,000
Wabash.....	Wabash, St. Louis & Pacific.....	1,500,000
Indiana.....	Wabash, St. Louis & Pacific.....	1,500,000
Alton.....	Chicago, Alton & St. Louis.....	1,500,000
Rock Island A.....	Chicago, Rock Island & Pacific.....	1,400,000
“ B.....	Chicago, Rock Island & Pacific.....	1,000,000
Air Line.....	Chicago, Milwaukee & St. Paul.....	660,000
Galena.....	Chicago, Milwaukee & St. Paul.....	670,000
Iowa.....	Chicago, Milwaukee & St. Paul.....	1,450,000
Fulton.....	Chicago, Milwaukee & St. Paul.....	350,000
City.....	Chicago, Milwaukee & St. Paul.....	900,000
Union.....	Chicago, Milwaukee & St. Paul.....	700,000
St. Paul.....	Chicago, Milwaukee & St. Paul.....	860,000
National.....	Chicago, Alton & St. Louis.....	850,000
St. Louis.....	Chicago, Alton & St. Louis.....	800,000
Pacific B.....	Atchison, Topeka, Santa Fe & California.....	1,000,000
Neely.....	Chicago, Milwaukee & St. Paul.....	600,000
Danville.....	Chicago, Milwaukee & St. Paul.....	500,000
Illinois River.....	Chicago, Milwaukee & St. Paul.....	150,000
Total.....		28,840,000

EXHIBIT F.

Showing the Amounts of the Different Kinds of Grain and the Total Amount in Store in the Public Warehouses of Chicago, at the close of Each Week during the Year ending October 31, 1892.

Date.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total.
1891.						
November 7.....	5,842,630	850,506	998,175	482,346	290,759	8,464,416
November 14.....	5,885,669	690,344	965,800	560,789	312,450	8,415,052
November 21.....	6,515,268	608,656	786,617	390,798	374,112	8,675,451
November 28.....	6,935,435	867,609	808,322	472,314	266,891	9,350,571
December 5.....	7,548,080	445,683	664,861	432,717	131,976	9,263,317
December 12.....	8,009,338	621,818	672,690	535,276	113,666	9,952,788
December 19.....	8,439,238	1,156,122	783,965	540,970	101,831	11,021,226
December 26.....	8,701,123	1,668,862	849,250	570,260	102,587	11,892,082
1892.						
January 2.....	8,859,129	2,027,660	886,006	528,549	105,351	12,406,695
January 9.....	9,067,501	1,843,607	815,701	570,400	105,403	12,402,612
January 16.....	9,050,816	1,518,097	722,437	577,143	101,644	11,970,137
January 23.....	9,160,595	1,407,889	746,054	579,406	93,349	11,987,293
January 30.....	9,242,299	1,323,370	791,313	560,137	92,339	12,009,458
February 6.....	9,282,926	1,103,026	813,739	543,901	91,104	11,834,696
February 13.....	9,318,725	1,073,339	779,920	555,753	83,080	11,840,817
February 20.....	9,481,097	1,334,949	811,819	541,399	82,613	12,251,877
February 27.....	9,367,950	1,566,653	901,781	558,318	84,719	12,479,421
March 5.....	9,542,666	1,619,529	882,874	542,144	142,109	12,728,822
March 12.....	9,682,776	1,547,698	883,215	516,622	84,692	12,715,003
March 19.....	9,865,197	1,748,261	398,764	525,275	75,995	13,108,492
March 26.....	9,968,290	2,169,489	890,709	509,910	71,568	13,609,966
April 2.....	9,822,815	2,597,579	880,760	456,131	70,203	13,827,488
April 9.....	9,320,498	2,526,636	741,448	433,016	66,628	13,088,226
April 16.....	8,728,111	1,980,752	412,794	400,468	71,791	11,593,916
April 23.....	7,958,654	1,803,392	583,501	401,326	39,896	10,786,769
April 30.....	7,947,339	1,815,642	757,229	365,558	17,801	10,903,569
May 7.....	7,665,109	1,623,224	936,247	315,742	17,356	10,557,628
May 14.....	7,291,720	1,093,140	839,229	323,866	16,951	9,564,906
May 21.....	6,803,618	1,054,680	847,230	241,624	16,951	8,964,103
May 28.....	6,543,860	1,154,481	924,755	201,999	36,658	8,860,753
June 4.....	6,442,169	1,614,733	1,154,346	176,530	16,951	9,404,729
June 11.....	6,505,557	1,427,311	1,053,336	176,703	17,539	9,180,446
June 18.....	6,001,631	2,336,668	1,061,887	173,931	18,256	9,642,373
June 25.....	5,756,134	3,726,691	1,235,244	166,030	17,668	10,901,767
July 2.....	4,951,791	3,739,950	1,061,766	97,531	18,910	9,868,948
July 9.....	4,686,757	4,108,667	1,463,713	101,107	21,857	10,387,101
July 16.....	4,562,671	4,118,503	1,733,548	108,748	22,712	10,546,182
July 23.....	4,399,446	3,911,156	1,555,362	100,858	24,982	9,991,804
July 30.....	3,944,613	4,012,125	1,734,130	98,362	24,075	9,813,305
August 6.....	4,337,565	3,809,350	2,052,202	108,829	23,631	10,381,577
August 13.....	5,119,994	3,730,252	1,339,662	150,143	24,034	10,364,085
August 20.....	5,624,980	4,097,817	1,437,213	119,457	24,620	11,304,087
August 27.....	6,202,694	4,303,427	1,625,576	152,977	43,788	12,328,462
September 3.....	6,391,848	4,626,105	1,854,096	189,881	45,007	13,006,937
September 10.....	6,752,624	5,243,603	2,162,485	212,210	59,001	14,429,923
September 17.....	6,750,722	4,818,234	2,347,629	216,886	42,099	14,175,577
September 24.....	7,229,451	4,498,729	2,470,931	256,817	100,933	14,556,861
October 1.....	7,494,623	4,663,222	2,422,577	320,380	175,871	15,076,672
October 8.....	8,303,936	4,927,437	2,505,969	333,603	167,133	16,238,078
October 15.....	8,935,824	5,449,845	2,596,911	371,405	224,614	17,628,599
October 22.....	3,970,218	6,376,794	2,593,522	412,910	208,343	18,561,789
October 29.....	9,649,871	6,581,340	2,493,430	431,348	175,473	19,730,467

RULES

GOVERNING THE INSPECTION OF GRAIN IN THE CITY OF CHICAGO, STATE OF ILLINOIS.

IN FORCE FROM AND AFTER NOVEMBER 14, 1892,

RULE 1.—WINTER WHEAT.

No. 1 White Winter Wheat—shall be pure White Winter Wheat, or Red and White mixed; sound, plump and well cleaned.

No. 2 White Winter Wheat—shall be White Winter Wheat, or Red and White mixed; sound and reasonably clean.

No. 3 White Winter Wheat—shall include White Winter Wheat, or Red and White mixed; not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 White Winter Wheat—shall include White Winter Wheat, damp, musty, or from any cause so badly damaged as to render it unfit for No. 3.

No. 1 Long Red Winter Wheat—shall be pure Red Winter Wheat of the long-berried varieties; sound, plump and well cleaned.

No. 2 Long Red Winter Wheat—shall be of the same varieties as No. 1, sound and reasonably clean.

Hard Winter Wheat—The grades of Nos. 1, 2 and 3 Hard Winter Wheat shall correspond in all respects with the grades of Nos. 1, 2, and 3 Red Winter Wheat, except that they shall be of the Turkish variety.

In case of mixture of Turkish Red Winter Wheat with Red Winter Wheat, it shall be graded according to the quality thereof and classed as Hard Winter Wheat.

No. 1 Red Winter Wheat—shall be pure Red Winter Wheat of both light and dark colors, of the shorter-berried varieties; sound, plump and well cleaned.

No. 2 Red Winter Wheat—shall be Red Winter Wheat of both light and dark colors; sound and reasonably clean.

No. 3 Red Winter Wheat—shall include Red Winter Wheat not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

No. 4 Red Winter Wheat—shall include Red Winter Wheat, damp, musty or from any cause so badly damaged as to render it unfit for No. 3.

In case of the mixture of Red and White Winter Wheat, it shall be graded according to the quality thereof, and classed as White Winter Wheat.

No. 1 Colorado Wheat—shall be sound, plump and well cleaned.

No. 2 Colorado Wheat—shall be sound, reasonably clean, and of good milling quality.

No. 3 Colorado Wheat—shall include Colorado Wheat, not clean and plump enough for No. 2, but weighing not less than fifty-four pounds to the measured bushel.

RULE 2—SPRING WHEAT.

No. 1 Northern Spring Wheat—must be northern grown Spring Wheat, sound and well cleaned, and must contain not less than 50 per cent of the hard varieties of Spring Wheat.

No. 1 Spring Wheat—shall be sound, plump and well cleaned.

No. 2 Spring Wheat—shall be sound, reasonably clean, and of good milling quality.

No. 3 Spring Wheat—shall include all inferior, shrunken or dirty Spring Wheat, weighing not less than fifty-three pounds to the measured bushel.

No. 4 Spring Wheat—shall include Spring Wheat damp, musty, grown, badly bleached, or for any cause which renders it unfit for No. 3.

White Spring Wheat—The grades of Nos. 1, 2 and 3 White Spring Wheat shall correspond with the grades of Nos. 1, 2 and 3 Spring Wheat, except that they shall be of the White variety, or shall contain 5 per cent, or more, of such White Wheat.

Black Sea and Flinty Pffe Wheat—shall in no case be inspected higher than No. 2, and Rice Wheat no higher than No. 4.

Frosted Wheat—shall in no case be graded higher than No. 4, except that the grade of No. 3 may contain as much of said Frosted Wheat as it is customary to allow of Wheat damaged in any other way.

RULE 2½.—MIXED WHEAT.

The grades of Nos. 2 and 3 Mixed Wheat shall be equal in quality to the grades of Nos. 2 and 3 Red Winter Wheat, except that they shall include mixtures of Spring and Winter Wheat.

RULE 3.—CORN.

No. 1 Yellow Corn—shall be yellow, sound, dry, plump and well cleaned.

No. 2 Yellow Corn—shall be three-fourths yellow, dry, reasonably clean, but not plump enough for No. 1.

No. 3 Yellow Corn—shall be three-fourths yellow, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 1 White Corn—shall be sound, dry, plump and well cleaned.

No. 2 White Corn—shall be seven-eighths white, dry, reasonably clean, but not plump enough for No. 1.

No. 3 White Corn—shall be seven-eighths white, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 1 Corn—shall be Mixed Corn, of choice quality, sound, dry and well cleaned.

No. 2 Corn—shall be Mixed Corn, dry, reasonably clean, but not good enough for No. 1.

No. 3 Corn—shall be Mixed Corn, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 4 Corn—Corn that is badly damaged, damp or very dirty shall be graded no higher than No. 4.

Corn that is wet or in heating condition shall not be graded.

RULE 4.—OATS.

No. 1 White Oats—shall be white, sound, clean and reasonably free from other grain.

No. 2 White Oats—shall be seven-eighths white, sweet, reasonably clean and reasonably free from other grain.

No. 3 White Oats—shall be seven-eighths white, but not sufficiently sound and clean for No. 2.

No. 1 White Clipped Oats—shall be white, sound, clean, reasonably free from other grain, and shall weigh not less than thirty-six pounds to the measured bushel.

No. 2 White Clipped Oats—shall be seven-eighths white, sweet, reasonably clean, reasonably free from other grain, and shall weigh not less than thirty-four pounds to the measured bushel.

No. 1 Oats—shall be Mixed Oats, sound, clean and reasonably free from other grain.

No. 2 Oats—shall be sweet, reasonably clean and reasonably free from other grain.

No. 3 Oats—shall be all Oats that are damp, unsound, dirty, or from any other cause unfit for No. 2.

RULE 5.—RYE.

No. 1 Rye—shall be sound, plump and well cleaned.

No. 2 Rye—shall be sound, reasonably clean and reasonably free from other grain.

No. 3 Rye—All Rye damp, musty, dirty, or from any cause unfit for No. 2, shall be graded as No. 3.

RULE 6.—BARLEY.

No. 1 Barley—shall be sound, plump, bright, clean, and free from other grain.

No. 2 Barley—shall be of healthy color, not sound enough and plump enough for No. 1, reasonably clean and reasonably free from other grain.

No. 3 Barley—shall include slightly shrunken and otherwise slightly damaged Barley, not good enough for No. 2.

No. 4 Barley—shall include all Barley fit for malting purposes, not good enough for No. 3.

No. 5 Barley—shall include all Barley which is badly damaged, or from any cause unfit for malting purposes, except that Barley which has been chemically treated shall not be graded at all.

Scotch Barley—The grades of Nos. 1, 2 and 3 Scotch Barley shall correspond in all respects with the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Scotch variety.

Bay Brewing Barley—The grades of Nos. 1, 2 and 3 Bay Brewing Barley shall conform in all respects to the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Bay Brewing variety grown in the Territories and on the Pacific Coast.

Chevalier Barley—The grades of Nos. 1, 2 and 3 Chevalier Barley shall conform in all respects to the grades of Nos. 1, 2 and 3 Barley, except that they shall be of the Chevalier variety grown in the territories and on the Pacific Coast.

RULE 7.

The word "new" shall be inserted in each certificate of inspection of a newly harvested crop of Oats until the fifteenth day of August: of Rye, until the first day of September: of Wheat, until the first day of November, and of Barley until the first day of May of each year.

This change shall be construed as establishing new grades for the times specified, to conform to the existing grades of grain in all particulars, excepting the distinctions hereby established between the new and the old crop; and shall apply to grain inspected from store for two months after the times respectively above specified.

RULE 8.

All grain that is warm, or that is in a heating condition, or is otherwise unfit for warehousing, shall not be graded.

RULE 9.

All inspectors shall make their reasons for grading grain, when necessary, fully known by notations on their books. The weight alone shall not determine the grade.

RULE 10.

Each inspector is required to ascertain the weight per measured bushel of each lot of wheat inspected by him, and note the same on his book.

RULE I.—HOURS OF SERVICE.

Assistant Inspectors and Helpers will be at their posts and ready for business on the railroad tracks or at the elevators to which they may be assigned, at 7 o'clock A. M. each morning from the 15th day of March to the 15th day of November, and at 8 o'clock A. M. during the remainder of the year. They will remain at their posts until 6 o'clock P. M. from the 15th day of April until the 1st day of October, and until 5 o'clock P. M. during the remainder of the year.

RULE II.—EARLIER HOURS.

When the receipts are large, and the interests of the trade require an earlier inspection, all Assistant Inspectors and Helpers assigned to duty on the track will begin work at as early an hour as practicable.

RULE III.—EVENING WORK.

Inspectors stationed at elevators will, when necessary to complete the cargo or shipment upon which they may be engaged, remain on duty as late in the evening as they can see to inspect grain safely.

RULE IV.—WET WEATHER AND DARKNESS.

No Inspector stationed at an elevator is authorized to inspect out of store after dark or in wet weather, except on receipt, personally or through the office of the Chief Inspector, of an order written upon the printed

blanks, furnished by the Department, filled and signed by the owner of the grain or his authorized agent, relieving such Inspector of all responsibility for damage which may be caused by such wet weather or loss by such errors as are liable to occur by reason of darkness; but in every case the Inspector must be personally present when the grain is actually delivered on board, making his report of the inspection after such actual delivery.

The Chief Inspector of Grain is hereby authorized to collect on and after November 1, 1889, on all grain inspected under his direction, as follows:

For In-Inspection, 25 cents per car load; 10 cents per wagon or cart load; 40 cents per 1,000 bushels from canal boats; $\frac{1}{4}$ of 1 cent per bushel from bags.

For Out-Inspection, 50 cents per 1,000 bushels to vessels; 35 cents per car load to cars; 35 cents per car load to teams; or 10 cents per wagon load to teams.

P. BIRD PRICE, *Chief Inspector.*

RULES

PREScribed BY THE BOARD OF RAILROAD AND WAREHOUSE
COMMISSIONERS FOR THE ADMINISTRATION OF THE
DEPARTMENTS OF GRAIN INSPECTION AND
WAREHOUSE REGISTRATION IN THE
CITY OF CHICAGO, AND IN FORCE
FROM AND AFTER NOVEM-
BER 1, 1889.

RULE I.—OFFICE HOURS.

The offices of the Chief Inspector of Grain and the Warehouse Registrar for the City of Chicago shall be opened for business at 8 o'clock A. M. from the 15th day of April to the 15th day of November, and at 9 o'clock A. M. during the remainder of the year; and shall be kept open for business until 6 P. M. from the 15th day of April to the 1st day of October, and until 5 P. M. during the remainder of the year.

RULE II.—BOOKS AND RECORDS.

The said Chief Inspector shall keep a set of books, in which shall be entered an accurate account of all grain inspected, showing the quantity and quality of each variety, the amount of inspection fees chargeable thereon, by whom payable, and the amount collected; which books shall be open at all times to the inspection of the Commissioners. He shall also keep books of record of the inspection, accurately describing the separate lots of grain inspected, and shall, on application, furnish the Warehouse Registrar with such information as may be necessary to enable that officer to keep a record of all grain inspected into and out of all warehouses of class "A."

RULE III.—DUTIES OF THE CHIEF INSPECTOR.

The said Chief Inspector shall have a general supervision of all assistant inspectors and employes of his department, and enforce all laws, rules and regulations pertaining thereto, and shall report promptly, if, in his opinion, the services of any employe can be properly dispensed with.

In case of emergencies the said Chief Inspector shall have power to employ temporarily, in accordance with law, such additional help as the exigencies of the service may, in his opinion, demand; certifying that such additional help was necessary, and reporting the same monthly to the Commissioners.

And it shall be the duty of said Chief Inspector, when, in his judgment the interest of the service demands immediate action, to relieve from duty any of the employes in his department for any gross violation of duty, and at once report the same to the Commissioners, with such facts in the case as may be at his command upon which such action shall have been taken.

RULE IV.—MONTHLY REPORTS AND PAY ROLLS.

The said Chief Inspector shall, previous to the first Tuesday after the first Saturday in each month, transmit to the office of the Commission a statement (in duplicate) of (1) the amount of cash receipts from any and all sources during the previous month, (2) the amount of uncollected bills due the department, and a list of the names of persons or firms from whom due, with the respective amounts due from each, (3) the expenses of the department for the previous month, the statement to be accompanied by the bills of said expenses and the pay-rolls giving the names and duties of all employes of the department, (including those employed in the office of Warehouse Registrar and the Committee of Appeals) and the amount due to each. Said bills and pay-rolls being certified as correct by the Chief Inspector and Warehouse Registrar, as the case may be.

Upon the approval of said bills and pay-rolls by the Commission, and the return of the same to the Chief Inspector, the said Chief Inspector shall forthwith proceed to pay the said bills and pay-rolls from the funds of the department, and file the same, duly receipted, in his office as vouchers for such payment.

RULE V.—COLLECTION AND DISBURSEMENT OF FUNDS.

The Chief Inspector is hereby authorized and directed to collect such charges for inspection of grain as may be established from time to time by the Railroad and Warehouse Commission, and all other moneys that may become due on account of inspection service in the city of Chicago, and deposit the same to his own credit as Chief Inspector, to be drawn by him as Chief Inspector for the payment of salaries and other expenses of the department, upon pay-rolls and bills of expense approved by the Commission, as provided in Rule IV above.

He shall also daily report to the Commissioners the amount of collections made by him as Chief Inspector.

He is also authorized to make such arrangements for the collection of said inspection fees as he may deem proper, reporting the same to the Commissioners for their approval, and enforcing all such provisions in the premises as the Commissioners may enact.

RULE VI.—FEES FOR INSPECTION.

The said Chief Inspector is hereby authorized to collect, until further notice, on all grain inspected under his direction, as follows:

For Inspection on Arrival, 30 cents per car load: 10 cents per wagon load; 40 cents per 1,000 bushels from canal boats or vessels, and $\frac{1}{2}$ of 1 cent per bushel from bags.

For Inspection from Store, 50 cents per 1,000 bushels to vessels: 35 cents per car load to cars: 35 cents per car load to teams, or 10 cents per wagon load to teams.

RULE VII.—CUSTODY OF THE FUNDS, BOOKS AND PROPERTY.

The said Chief Inspector shall deliver to his successor in office all moneys, books, papers and other property remaining in his hands or subject to his control, at the expiration of his term of office or upon his removal from or discontinuance in office as such Chief Inspector, or turn the same over to the Board of Railroad and Warehouse Commissioners at any time when demanded by said Commissioners.

RULE VIII.—BASIS OF INSPECTION.

The grading and inspection of grain shall be strictly in accordance with the provisions of the 13th section of the act to regulate public warehouses and the warehousing and inspection of grain, and to give effect to Article XIII of the Constitution of the State of Illinois, approved April 25, 1871, in force July 1, 1871.

RULE IX.—“PLUGGED,” “LOADED” OR “SCOURED” GRAIN.

The said Chief Inspector, and all persons inspecting grain under his direction, shall in no case make the grade of the grain above that of the poorest quality found in any lot of grain inspected, when it has evidently been “plugged” or otherwise improperly “loaded” for the purpose of deception. Wheat which has been subjected to “scouring” or to some process equivalent thereto, shall not be graded higher than No. 3.

RULE X.—ATTEMPTS AT FRAUD OR INTERFERENCE.

All persons employed in the inspection of grain shall promptly report to the Chief Inspector in writing all attempts to defraud the system of grain inspection established by law; and all instances where warehousemen shall deliver, or attempt to deliver grain of a lower grade than that called for by the warehouse receipt.

They shall also, in the same manner, report all attempts of receivers or shippers of grain, or any other person interested therein, to instruct, or in any improper way to influence the action or opinion of any inspector in the discharge of his duty; and the Chief Inspector shall report all such cases to the Commission.

RULE XI.—TERMS AND SERVICE OF EMPLOYEES.

All persons appointed by the Commission to fill the various positions under the law, will hold their several positions for such time only as, in the judgment of the Commission, the interests of the service in which they may be employed shall demand.

And the compensation of all persons so appointed shall cease at the time their services are dispensed with.

RULE XII.—PERQUISITES PROHIBITED.

The employes of the Inspection Department are hereby prohibited from asking or receiving compensation from any railroad company, warehouseman, vessel owner or agent, or any other person, for any service rendered in the line of their duty as such employes. Any employe guilty of this offense shall be discharged from the service.

RULE XIII.—SUNDAY AND OTHER EXTRA SERVICE.

If any railroad company with a terminus at Chicago, any warehouseman, shipper, vessel owner or agent or any other proper person, shall desire the service of any employe of the Grain Inspection Department for the purpose of inspecting grain or doing other work in the line of his duty as such employe on Sunday, or on a legal holiday, or at night, said company, warehouseman, or person shall apply to the Chief Inspector of Grain for the service of such employe; and the Chief Inspector shall, if in his opinion great necessity exists for the service being rendered on Sunday or a legal holiday or at night, require such employe to perform the duty.

Provided, That no employe shall be required to do any service in the line of his duty on Sunday if he has conscientious scruples against Sunday labor; and,

Provided, further, That no grain shall be inspected out of any elevator after dark unless the person requesting such inspection shall furnish to the Chief Inspector, or to the inspector having charge of the elevator where such service is to be performed, a night order, written upon the blanks furnished by the department for that purpose, and signed by the owners of the grain, relieving the inspector from all responsibility for damage which may be caused by such mistakes as are liable to occur by reason of the darkness; and in every case the inspector must be personally present during the delivery of such grain on board.

RULE XIV.—COMPENSATION FOR EXTRA SERVICE.

Extra compensation at the rate of the regular wages of the employé shall be paid by the Grain Inspection Department to any employé who shall be required to do any work on Sunday, or a legal holiday, as provided in Rule XIII; and any employé who shall be required to work at night, as provided in said rule, shall receive upon each night order which shall be completed before midnight, the sum of three dollars, and upon all night orders requiring his presence after that time, five dollars. The cost of such service to the department shall be charged and collected from the company, warehouseman, vessel owner, agent, or other person at whose request it was rendered.

RULE XV.—DUTIES OF THE WAREHOUSE REGISTRAR.

It shall be the duty of the Warehouse Registrar to keep a registration book for each elevator of class "A" doing business in Chicago, in which shall be entered a correct description of each warehouse receipt that may be registered.

When such receipts are presented for registration, the said Registrar shall carefully compare the same with the returns which shall have been made to him by the inspectors stationed at the respective elevators, and if he shall thereby be satisfied of the correctness of the same, he shall stamp them with a proper stamp for that purpose, containing, in legible letters, the date of such presentation and the name of the Registrar, with the title of his office, "Warehouse Registrar, Chicago;" but if he shall find that any differences exist, he shall institute a thorough examination into the reasons therefor, and shall have such error corrected before affixing his stamp.

And if it shall appear that any fraud in the issuance of such receipts shall have been attempted by the warehousemen, the said Registrar shall at once report the same to the Commission.

RULE XVI.—REGISTRATION RECORDS.

The said Registrar shall carefully preserve all reports of receipts and shipments made to his office by the elevators of class "A," in pursuance of law, or such regulations as may be established, and shall keep an accurate account of the grain so reported, in proper books, with each warehouse firm of class "A," and when such reported shipments shall agree with the receipts cancelled for each shipment he shall mark "cancelled," with the date thereof, on his registration book, opposite the recorded description of such receipt.

RULE XVII.—THE REGISTRAR'S ASSISTANTS.

The said Registrar shall have general supervision over his assistants and such employés as the Commission may appoint, and shall direct all such employés in the discharge of their duties. In case of emergencies he shall

have power to employ, temporarily, such additional assistants as the exigencies of the service may demand, reporting the same monthly to the Commission, and certifying that such additional assistance was necessary. He shall also report to the Commission monthly, if, in his opinion, the services of the persons so employed can be properly dispensed with.

RULE XVIII.—WAREHOUSE LICENSES.

The said Registrar shall procure from the clerk of the Circuit Court of Cook county, and keep in his office, a complete list of all warehouse licenses granted by said Circuit Court of Cook county.

RULES

FOR THE GOVERNMENT OF THE COMMITTEE OF APPEALS,
ESTABLISHED BY THE BOARD OF RAILROAD AND
WAREHOUSE COMMISSIONERS, AND IN
FORCE FROM AND AFTER
NOVEMBER 1, 1889.

RULE I.—HOW APPEALS MUST BE TAKEN.

Any person, owner, consignee, warehouseman or shipper desiring to take an appeal from the decision of any grain inspector, as provided by law, shall make his said appeal in writing in a "Record of Appeals," provided for that purpose in the office of the Warehouse Registrar, clearly setting forth the kind, grade and locality of the grain in question, within twenty-four hours after the report of said inspector shall have been made; and in case such appeal shall not be taken within twenty-four hours, as aforesaid, or in case the grain in dispute shall have passed into a warehouse or away from the warehouse after inspection from store, or shall in any other manner have lost its identity, then the right of appeal shall be deemed waived and shall no longer exist.

RULE II.—NOTICES TO THE COMMITTEE.

It shall be the duty of the Warehouse Registrar, immediately upon receiving an appeal, as aforesaid, to ascertain from the Chief Inspector whether the car, canal boat or vessel in question has been entered in his office for re-inspection; and if it has not, to issue a notice to each member of the Committee of Appeals, apprising them of the fact of such appeal, and stating the kind and location of the grain, and the grade given to it by the local inspector; but, if such car, canal boat or vessel shall have been entered in the office of the Chief Inspector for re-inspection, then notices to the committee, as above provided shall not be issued until report of such re-inspection shall have been made.

RULE III.—DUTIES OF THE COMMITTEE.

It shall be the duty of the Board of Appeals, upon the receipt of notice as aforesaid, to proceed at once to carefully examine the grain in question, and render their decision as to the quality and grade thereof, in accordance with the legal standard established by the Railroad and Warehouse Commission under the laws of the State, in writing, upon the "Record of Appeals" provided for the purpose in the office of the Warehouse Registrar: said decision to be final; and the Chief Inspector shall, when so requested, issue a certificate of the grade of the grain in question in accordance with the decision of the Committee of Appeals.

It shall also be the duty of said Committee of Appeals to furnish to the Chief Inspector a fair sample of each lot of grain, the grade of which has been changed by them.

RULE IV.—DEPOSIT CHARGED FOR AN APPEAL.

In every case of appeal from the decision of the Inspection Department, if the appeal be on a car load, the appellant shall, at the time of taking his appeal, deposit with the Warehouse Registrar the sum of five dollars; and if on a boat load, the sum of nine dollars: which sum shall, upon demand, be returned to the appellant if the appeal be sustained; but, if the appeal be not sustained, said sum shall be turned over within two days to the Chief Inspector, to be by him deposited with the funds of the department.

RULE V.—RECORDS OF THE COMMITTEE.

The Warehouse Registrar shall keep in his office a correct record of all the official acts of said Committee of Appeals, and shall, immediately after each decision of said committee changing the grade of any lot of grain, report such change to the Chief Inspector.

RULES

FOR THE GOVERNMENT OF THE ASSISTANT INSPECTORS AND
HELPERS, ESTABLISHED BY THE CHIEF INSPECTOR AND
APPROVED BY THE BOARD OF RAILROAD AND
WAREHOUSE COMMISSIONERS, AND IN FORCE
FROM AND AFTER NOVEMBER 1, 1889.

RULE I.—HOURS OF SERVICE.

Assistant Inspectors and helpers will be at their posts and ready for business on the railroad tracks or at the elevators to which they may be assigned at 7 o'clock A. M. each morning from the 15th day of March to the 15th day of November, and at 8 o'clock A. M. during the remainder of the year. They will remain at their posts until 6 o'clock P. M. from the 15th day of April until the 1st day of October and until 5 o'clock P. M. during the remainder of the year.

RULE II.—EARLIER HOURS.

When the receipts are large and the interests of the trade require an early inspection, all Assistant Inspectors and Helpers assigned to duty on the track will begin work at as early an hour as practicable.

RULE III.—EVENING WORK.

Inspectors stationed at elevators will, when necessary to complete the cargo or shipment upon which they may be engaged, remain on duty as late in the evening as they can see to inspect grain safely.

RULE IV.—WET WEATHER AND DARKNESS.

No Inspector stationed at an elevator is authorized to inspect out of store after dark or in wet weather, except on receipt, personally, or through the office of the Chief Inspector, of an order written upon the printed blanks furnished by the department, filled and signed by the owner of the grain, or his authorized agent, relieving such Inspector of all responsibility for damage which may be caused by such wet weather, or loss by such errors as are liable to occur by reason of darkness; but in every case the Inspector must be personally present when the grain is actually delivered on board, making his report of the inspection after such actual delivery.

RULE V.—VESSELS AND CARS TO BE CLEAN.

Assistant Inspectors stationed at elevators will see that the vessel or car into which they may inspect grain is clean and in proper condition to receive the same.

RULE VI.—RETURNS AND RECORDS OF ASSISTANTS.

All entries in registration, shipping and track books of grade, weight, quality, character and general remarks relating to the grain, must be plainly written and correctly footed; abbreviations to be avoided as much as possible, that no mistakes may be made in copying the same.

Entries on track and registration books must be continuous, in order that there be but one footing of columns to each daily report sent to this office. All inspection tickets placed upon cars by Inspectors on track must be plainly written with the aniline pencil furnished for that purpose.

Each Assistant Inspector in charge of track inspection must sign his name and official rank to each daily return of inspection, and each Inspector stationed at an elevator will sign his name and rank to each stub and duplicate on each page of his shipping book, and at the end of his daily report on registration book.

RULE VII.—DUTIES OF THE MESSENGER.

It shall be the duty of the Messenger to collect from the different inspection stations the books containing the daily reports of inspection, and from the elevators the registration and shipping books and samples of shipments, so timing his trips that the collections from the elevators shall be returned to this office by 8 o'clock A. M., and the books from the inspection stations by 11 o'clock A. M. each day. He shall also collect from the elevators or tracks such samples of grain as may be required for the use of this office.

RULE VIII.—HOURS OF MAKING REPORTS.

Inspectors at elevators will have their shipping and registration books written up at night, that the Messenger may collect them on his first or early morning trip, arriving at this office at 8 o'clock A. M. Said Inspectors will make up their report of receipts into store at 12 o'clock noon on the last day of each month, and immediately forward the same to the Registration office.

RULE IX.

Any use whatever of malt, vinous or spirituous liquors by the employés of the department is strictly prohibited. The penalty for *any* violation of this rule shall be suspension, and the penalty for intoxication shall be discharge from the service.

JOHN R. WHEELER,

ISAAC N. PHILLIPS,

W. L. CRIM,

Commissioners.

JAMES H. PADDOCK, *Secretary.*

Springfield, Ill., Nov. 1, 1889.

APPENDIX.

No. 1.

REPORT OF CHARLES HANSEL, CONSULTING ENGINEER.

PREPARED UNDER DIRECTION OF THE COMMISSION.

RAILWAY SAFETY APPLIANCES

IN

THE KINGDOM OF GREAT BRITAIN.

TO THE HONORABLE RAILROAD AND WAREHOUSE COMMISSION. *Springfield, Illinois:*

GENTLEMEN:—I herewith respectfully submit my report bearing on safety appliances, in railway operation in the United Kingdom, in accordance with your instructions, given under date of January 14, 1892, viz:

“WHEREAS, The General Assembly of the State of Illinois has, by law, imposed upon the Railroad and Warehouse Commission of said State the duty of passing upon the efficiency of safety appliances at railroad crossings, and

“WHEREAS, The tendency of recent legislation in this State has been in the direction of increased precautions for safety and higher speed in travel, and points to the enlargement of the functions of this Commission in these directions, and

“WHEREAS, It is highly desirable and for the public good that, in the practical construction and application of the recent statute of Illinois upon the subject of the protection of crossings by interlocking and safety appliances, the Commission be guided by the latest and most approved methods, as demonstrated by actual experience: and

“WHEREAS, The Commission is informed and believes that the subject of safety appliances, and particularly the protection of crossings and junctions of railroad tracks by interlocking and signals, has been more fully and thoroughly considered and more highly developed and under the test of a longer experience in the Kingdom of Great Britain than elsewhere.

“Therefore, be it ordered and resolved by the said Railroad and Warehouse Commission of the State of Illinois, That Mr. Charles Hansel, the Consulting Engineer of this Commission, be and he is hereby authorized to visit the Kingdom of Great Britain, and there study the subject of railway safety appliances in general, and particularly the subject of interlocking, signals and other devices for the protection of railway crossings and junctions: that, for that purpose, said Hansel have sixty days leave of absence: and he is hereby instructed to embody the results of his study and investigation in a report, to be presented, on his return, to this Commission for its information and guidance. * * * *”

—14 R. R.

Before a comparison of values can be made between existing conditions it is necessary that knowledge be had of the conditions surrounding the birth and growth of the things compared, and of the office which each must fill. To compare the present physical condition of the railways of Great Britain with the railways of the United States without considering the condition of each country and the relation of its commerce to the railway would, I think, be of little value.

Great Britain with an area of 89,222 square miles; 58,320 of which are in England and Wales; had, at the time the first railway was opened in 1825, (The Stockton and Darlington) a population of 16,400,000, of which number 13,900,000 occupied England and Wales.

The cotton, woolen and silk mills of Lancaster, Middlesex, Surrey, Kent, Gloucester, Hereford, Yorkshire, Derbyshire and Cheshire were busy with a great industry in 1825.

Two hundred silk mills were in operation, and the looms of Manchester alone consumed 264 million pounds of imported cotton. The ship building on the Clyde, the steel and iron mills of Leeds and Sheffield were then great industries.

The 2,300 miles of canals of England, with her highways, furnished means of transport. At the close of the year 1830 not more than 95 miles of railway were built at a cost of \$4,204,625. 1840 witnessed this increased to 1,435 miles at an expenditure of over two hundred and seven millions of dollars, and now it numbers 16,300 miles, of which 10,261 miles is double, triple or quadruple, and the total investment is over four billion, six hundred thousand dollars, or 43 per cent. of the total value of the 170,601 miles of the United States, while the population has increased about 100 per cent.

The construction of railways in Great Britain was undertaken originally by a vast number of small companies, each obtaining separate acts of Parliament deemed requisite for their existance. These small companies were usually formed of persons interested in manufactories, who saw in this new method of transportation possibilities of greatly increasing their business. That they judged wisely has been demonstrated.

In the half century in which Great Britain has built railways its material progress has been vastly greater than that of the whole five previous centuries.

In Great Britain traffic was waiting for transportation. Contrast this situation with that of the United States at the same period.

In 1830, 24 states, the District of Columbia and the three territories of Michigan, Arkansas and Florida gave a total population of 12,866,000 persons, of which number 2,000,000 were slaves. The vast territory of 2,494,191 square miles was populated by but 10,866,000 free persons. Illinois counted but 157,445 persons.

The vast territory west of the Mississippi was unexplored, and the railway developement in the United States has had to adapt itself to a new and rapidly developing country. With money bearing from 9 to 10 per cent. the importance in saving in materials and labor has been very much greater in the United States than in Great Britain.

Great Britain's industries have, from the beginning, furnished more traffic than the transportation facilities afforded. Her railways were sprung from the needs of commerce overflowing existing channels. Compare this condition with the development of the United States in 1830, when the South Carolina R. R. was opened. Instead of finding swarming factories and the fruits of an ample harvest ready to fill its capacity, the railway had first to push its way through unpeopled lands and furnish the first means of transportation to infant industries. It may be truly said that in the United States the railways developed the people, while in Great Britain the people developed the railways. For this reason Great Britain was able to build well from the very beginning.

Observing the contrasted conditions surrounding the birth and development of railways in the two countries, it is hardly possible to draw comparisons of value; and I will not attempt to contrast methods, but rather to represent railways as I observed them.

PERMANENT WAY.

Owing to the fierce opposition of the English country gentlemen to innovation in methods of conveyance, and the superstitious prejudice of the commoners, the first surveys for railways in Great Britain were attended by personal danger to the field party, and it was difficult to secure the best location between two points. This feeling of local opposition was also one important factor in the heavy cost of construction, as every foot of right of way was purchased at a conciliatory figure or condemned by process of law, which resulted in exorbitant values. Sir Astley Cooper, who was made a *Sir* for cutting a *wen* out of George the Fourth's neck, charged Stephenson with contemplating the destruction of the *noblesse*, because it was necessary to cut through his estate, to confer upon him the benefits of the railway.

These examples of extravagant opposition are cited in order to account for the great cost of construction, and because the location was influenced by the landowners. This is most emphatically demonstrated in the case of the location of the Liverpool and Manchester Railway, the first practical steam railway opened. The opposition of Lords Derby and Sefton caused the most expensive works on the line. These gentlemen, by their influence in Parliament, succeeded in keeping Stephenson off their estates, which made it necessary to build a mile and one-half of tunnel under Liverpool, from Wapping to Edgehill. The Olive mount cutting and the Whiston and Sutton hills incline were also the result of this opposition.

In the items of cost in the construction of this line is found \$785,705 charged to Parliamentary law and surveying, being about 21 per cent. of the total cost, or about \$24,500 per mile; this line being the first practical railway the expenses of Parliament Law and surveying were unusually heavy, yet the average cost of parliamentary expenses will probably be not less than \$15,000 per mile, a sum quite sufficient to build many of our prairie roads.*

Stephenson's policy, in the location of railways, was to incur a large expenditure in construction in order to avoid heavy gradient and curvature.

The ruling gradient of the Liverpool and Manchester Railway was 1 in 900 where locomotive is used. The incline at Rainhill summit was worked by cable and stationary engines. The London and Birmingham is 1 in 330. The Great Western, one of the earliest and now among the greatest, was located with a gradient of but 1 in 1320 for the greater part of the way.

As the powers of the locomotives became understood, construction was cheapened by increasing the gradient. Many lines were constructed with grades of 1 in 70, 1 in 75 and 1 in 80. The Great Northern, from London to York, has a ruling gradient of 1 in 200. It was long held that the only correct principle upon which to locate a grade line was to secure as near an approximation as possible to a level surface.

The London and South Western has long, steep gradients, the summit at Litchfield being 400 feet above London and Southampton. For a distance of 17 miles from London there is a uniform grade of 1 in 250. Many of the railways of Great Britain were constructed on the theory of undulating grades. The Desborough bank, on the Midland, is approached by a grade of 1 in 50 for a distance of 4 miles on each side. This location, however, was caused by a lack of funds, although \$4,500,000 was expended on 60 miles.

The country traversed by the Lancashire and Yorkshire is probably the most thickly populated of any like area in England. The road is made up of many branches, with forty terminal stations, numbering among them such important ports as Liverpool, Fleetwood, Southport, Goole and Hull, and many junction points in the counties of York and Lancashire, with the largest manufacturing city in the kingdom, Manchester, as the fountain head. The gradients are unusually heavy and irregular. From Heapey to Brinscall, 4 miles, 1 in 65. From Middleton junction to Werneth, three-fourths mile, 1 in 27, or 196 feet per mile. From Wardleworth to Facit, $4\frac{1}{2}$ miles, 1 in 60. Springwood junction to Stocks Moor, $5\frac{1}{2}$ miles, 1 in 100. Baxenden to Accrington, 2 miles, 1 in 40, and from Padiham Junction to Padiham Station, $1\frac{1}{2}$ miles, 1 in 40.

*Brighton Railway, \$22,030; Manchester and Birmingham, \$25,950; Blackwall, \$72,070.

A reproach on a system of legislation which permits impediments to be thrown in the way of works of great public use.

When Parliament first adopted requirements specifying the maximum curvature allowable on railways, the minimum limit of radius was fixed at one mile or a $1^{\circ} 5'$ curve. It was soon demonstrated that curves of one-half mile did not increase the track resistance in the slightest degree.

The curvature, however, is very light. On the Manchester and Leeds railway I found two curves of 660 feet radius or $8^{\circ} 40'$.

On the Lancashire and Yorkshire curves of the same radius have been increased to 2,000 feet radius, as it was deemed inconvenient to operate curves of so short a radius as 660 feet. Fifty per cent. of the L. and N. W. is straight line.

I found no curvature on any line in Great Britain of as short radius as is found on many of our trunk lines, and which are operated with entire safety.

It has been the general practice in England to construct bridges over highways, cattle passes and farm subways by using cast iron arches* on stone abutments, although in many cases solid masonry is constructed, and in no case did I find wood used for bridges carrying railway. The use of cast iron has not, however, proven satisfactory, and its use now is generally condemned as a material for railway structures, and its use has been generally superceded by plate girders of similar design to those in common use in the United States.

I found many noble specimens of arch masonry.

Among the most notable viaducts of masonry in England is the Congleton, on the Manchester and Birmingham railway. Built entirely of stone, 3,078 feet long and 106 feet in height, constructed at a cost of \$565,000.

The high level bridge at New Castle-on-Tyne, used by the N. E. Ry., the Royal Border bridge, Rincorn, Britannia and others are fine types of the viaduct. The pin-connected through-bridge common in the United States I did not meet with and do not know of any in service. There is nothing unusual in the construction of the bridges I examined, with the exception of some cast iron bridges. The factor of safety is unusually high. I am inclined to pass over this subject, feeling that the American builder has outstripped his cousin in the construction of substantial light bridges. The Forth bridge stands as a monument of success and is majestic. I was given opportunity to examine this final triumph of Sirs John Fowler and Benjamin Baker. This bridge was constructed for the use of the North British railway. It is 8 miles distant from Edinburgh, and crosses the Firth of Forth at Queensbury. At this point the Firth is divided into two channels by the Island of Inchgarvie. The water between

*The secretary of the Board of Trade says, in his last annual report:

"The accident which occurred on the 1st of May, owing to the failure of a cast iron girder of the Portland Road bridge, on the Brighton railway, led the Board of Trade to issue a circular to the railway companies, calling attention to the subject of iron railway bridges. * * * Owing to voluminous nature of the information required * * * there has been an unavoidable delay in the returns. * * *

This accident lead the railways to investigate the subject of cast iron bridges, and the practice is now generally condemned.

this island and the main land reaches 200 feet in depth, precluding the use of intermediate piers. The island is of trap rock, forming a secure foundation for the central pier. The bridge is composed of three double lattice-work cantilevers, 1,360 feet in length, poised on three sub-structures and connected at their extremities by through-truss spans, 350 feet long. Three are 1,700 feet each, 2 of 675 feet each, 15 of 168 feet each, and 5 of 25 feet each. There is one mile of main spans and one-half mile of approach. The clear headway of the center of the spans is 150 feet at high water, and the extreme height of towers is 361 feet. The bridge varies from a width of 120 feet at the base on piers to $31\frac{1}{2}$ feet at the ends, measured at the road way. This variation in width was made to resist irregular stresses. The columns of the towers are of plate steel, $1\frac{1}{4}$ inches thick, manufactured like the barrel of a locomotive and are 12 feet in diameter, reduced toward the top to 5 feet, and three-eighths inch plates. It is calculated that any possible stress on any member of the bridge is at the rate of $7\frac{1}{2}$ tons per square inch of sections. The required ultimate strength of steel under compression is from 34 to 37 tons per square inch, and under tension from 30 to 33 tons. These general specifications are given for information of those interested in this particular structure.

ROADBED AND RIGHT OF WAY.

The side slopes of both cutting and embankment is usually $1\frac{1}{2}$ to 1. Some cuttings are 100 feet deep and the embankments are stupendous. The London and Birmingham R. R. excavated $10\frac{1}{2}$ millions of cubic yards of earth or about 100,000 yards per mile. The heaviest cutting on the line is $2\frac{1}{2}$ miles long and 40 feet deep. The Olive Mount cutting on the Liverpool and Manchester R. R. is over 100 feet deep; over 480,000 yards of rock was removed in its excavation. The sand cutting through the Corvan Hills on the line of the New Castle and Carlisle Ry. are 110 feet deep with slopes of $1\frac{1}{2}$ to 1 and stand well.

The cuttings are protected from wash of surface water by well constructed crest ditches, extending along the top of cut. These ditches are sometimes built of brick and in all cases they are carefully constructed and guarded. The maintenance of roadbed is given the most careful attention. Where water is known or expected to exist it is carried off from the roadbed. Retaining walls of masonry or concrete are built in all cases where the width of right of way will not allow the slopes to be carried out far enough to prevent slipping.

The slopes of cuttings and embankments when dressed are furnished with a layer of about six inches of soil, in which is sown grass and clover, which soon forms a protecting turf. The right of way is necessarily wide, owing to the room required for double, triple or quadruple tracks. The policing is of the highest standard, no *debris* is permitted to remain on the right of way, and no trespassers are allowed upon the companies' property. In many cases the right of way is fenced by a substantial stone wall, and on branch lines a high strong fence guards the property. No

person is permitted on the track or right of way without permit from officer in charge. A glance at the list of trespassers killed in the United States will recall the fact that our railroads kill more trespassers than employes. The statute against trespassing is strictly enforced, and in consequence the accidents from that source is reduced to a minimum.

TRACK ARRANGEMENT.

This prime feature of the permanent way is perhaps the most closely watched of any part of the work. The gauge is now a standard of 4 ft. 8½ in., the Great Western having changed the last of its 7-foot gauge during April of this year. With some unimportant differences in detail, the track is constructed as follows:

The ties are sawed to a scantling of 9 feet in length, 10 inches wide and 5 inches deep, from selected well seasoned blattic redwood timber or fir. No deviation from these dimensions are permitted, thus insuring uniformity. The ties are delivered at the works, where they are subject to a treatment of creosote oil. The ties during this treatment are enclosed in a cylinder of steel, which is filled with creosote oil under pressure, and it is found that the tie will absorb 3¼ gallons. After this treatment the tie will weigh about 160 pounds.

The ties are then framed to receive two cast-iron chairs, weighing from 45 to 50 pounds each. The London and Northwestern secure these chairs to the tie by two iron spikes and two galvanized iron screws, with a layer of hair felt interposed between the bottom of casting and tie. The Great Northern use two iron spikes and two oak trenails. The spike to resist shiving strain and the trenails to clamp the chair to tie; both systems give excellent result.

The spikes are cup-headed, tapered, six inches long and weigh 19 oz. each. The screws are 6½ in. long with hexagonal head.

The heaviest rails in use are on the London and Northwestern Ry., weighing 90 pounds per lineal yard, and 30 feet long, except on bridges, where the rails are 60 feet long. The Lancashire and Yorkshire use 86-pound rails. The Great Northern 85, Midland 85, and nothing less than 85-pound-rail is now being laid.

There are two types of rail in general use, called the bull-headed and double-headed rails. The New South Wales, Northeastern, London and Southwestern, The Southeastern and Great Northern of Scotland use the double-headed rail. These rails are made reversible. The upper and lower tables of the rails are curved to a radius of 5½ inches.

Bull-headed rails are used by the Lancashire and Yorkshire, the Midland, London and Northwestern, Great Northern, Great Western, Metropolitan, Manchester, Sheffield and Lincolnshire, and others. This list comprises the greatest trunk lines of England, and indicates the preference for the bull-headed rail. This rail is made with but one running face and is not reversible. The upper and lower face of the rail are curved to a radius equal to its height, which varies from 5 to 5½ inches.

The width of head varies from $2\frac{1}{2}$ inches to $2\frac{3}{4}$ inches. The fish-plates forming the joints vary from 26 to 32 inches in length, and are either plain bars with hollow face next to rail or are made with a clip forming a grip under the base. The clip plate is used on the Midland, London and Northwestern, London and Southwestern, and Metropolitan Rys.

The ties, being fitted with the chairs in the shop, are distributed on the line, varying from 10 to eleven for each 30 foot rail. The spacing of ties varies from 2 feet, 8 inches to 3 feet. The question of suspended versus the supported joint and the square joint versus the broken joint, which has been a subject of endless debate in the associations of road-masters in the United States, seems to be settled in Great Britain in favor of the suspended and square joint. I may speak of this with personal satisfaction, as I have always held this opinion and have put it into practice for many years. The only exception to this method I noticed in England was in the case of the Great Northern Railway, which uses a joint tie and broken joints.

TRACK ARRANGEMENT.

The switches are generally of the split-point type, and are seldom facing the traffic. So dangerous are facing points felt to be, especially on high speed routes, that on many railways of Great Britain they are absolutely forbidden at all except at terminal stations and at some intermediate stations where every train is ordered to stop. Great Britain now reports a total of 16,300 miles of operated railway; of this, 10,261 miles are reported as double line, and 6,039 as single. England and Wales report 9,004 miles double, and 4,391 miles single, or a total of 13,395 miles. This statement does not, however, furnish any data as to the total length of operated main tracks for the reason that all 3, 4, 5, 6, 7, 8 and 10th tracks are reported under head of double line. I do not know of an important terminal in Great Britain where there are not more than two tracks extending from the station some distance, and the Great Northern, London and Northwestern and others have 8 and 10 tracks from their London station.

The London stations are all entered by elevated track, the road bed being carried over the streets and buildings on masonry. To detail the construction of these termini would require drawings and more space than is desirable in this report. I believe it desirable, however, to devote some space to a description of the gravity yards at Edge Hill, Liverpool. The enormous amount of traffic passing through these yards attended by a minimum of accidents to persons makes it a proper and interesting subject for consideration.

The freight business on the London and Northwestern is so conducted as to run full loads between the most important points, as from London to Birmingham, Liverpool, Manchester and Edinburgh, etc., while way trains handle business to intermediate points. Liverpool being the largest sea port in the Kingdom, much of the foreign business is done through

that port and the several railroads centering there have various dock and warehousing property, making it necessary to have special goods stations for various products of commerce.

By referring to plate one it will be found that the L. & N. W. Ry. have six stations in Liverpool for freight and one passenger station. The configuration of the ground makes it necessary to use tunnels from Waterloo and Wapping Dock stations and also offers a location for a gravity yard about one and one-half miles from Lime Street Station, which is called Edge Hill. In this vicinity the company has acquired about 200 acres of land and have constructed a complete gravity yard containing 60 miles of track, and costing \$10,000,000. The purpose of this yard is to marshall or make up trains with the least danger and expense and in the shortest time.

Plate two shows a diagram of the principal tracks in the system which I have compiled from a map furnished me by the General Manager, Mr. George Findlay. The summit of the yard is about one and one-quarter miles from the foot, and here are located the upper *reception lines*, eight in number, with a capacity of 294 "waggon" or cars. Below the reception lines are twenty-four parallel lines arranged in two groups, A and B. These groups are called the *sorting sidings*, and have a capacity of 1,065 cars. Following are two separate systems of marshalling sidings called the "*Gridirons*," C. D. & E. F. These Gridirons lead into the *lower reception and departure* lines.

In loading at Alexandria, Canada, Waterloo, Wapping, Crown Street or Carston, for intermediate stations between Liverpool and London, no attention is given to the arrangement of cars at the several stations. Cars may be loaded at any of the six stations for any of the several goods depots at these stations. As cars are loaded they are moved out of the way until a full string is made for the summit of Edge Hill. A switching or "shunting" engine is then coupled on, and this string, with cars for various trains and stations, is moved to the upper reception sidings. Each car has a number chalked upon it which indicates to the initiated to which train and station it belongs. After reaching the upper reception lines the brakes are set and the engine is sent back for another load. The brake consists of a side lever, easily accessible, which may be applied or released by the switchman as the car moves. The switchmen are provided with a strong stick, which they may insert between the bottom of car and the top of the brake lever and ride with the car. The sorting sidings A and B are for the purpose of marshalling cars by trains, each track in the group representing a train. For illustration, we will suppose that the string of cars delivered to the reception siding contains cars for six stations, as follows: Crewe, Stafford, Rugby, Northampton, Bletchley and London, and that at each of these cities there are several goods stations. It is necessary that the train be arranged so that the cars for Crewe will be at the rear of train leaving Edge Hill, and that they shall be arranged in sequence for convenient delivery to the ware

houses at each station. Following the movement of this string of cars (for it is not yet a train), we observe that as the cars are detached from the string in the upper reception sidings they move by gravity with considerable velocity toward the sorting sidings. As the chalked number is observed, a switch is thrown and the car takes the proper track for its train.

The cars are now arranged for the train, but are not arranged in the order of delivery. Referring to diagram, plate 3, we find train represented before entering "*Gridiron*," "E." The first car is found to be destined to Crewe, the next to Stafford, etc., but the remaining cars for these stations are scattered through the train, without regard to order of delivery. In the first "*Gridiron*" we find the cars grouped for station delivery, *i. e.*, all cars for Crewe, Stafford, etc., are now together, but they are not arranged in sequence; a further sifting is necessary, and the cars are passed into the second "*Gridiron*," "F," where we find all cars grouped to correspond to station delivery, and in the order of delivery at the station. The "marshalling" of or making up the train is now simple. The first row is dropped out in sequence, and the others follow in like manner, the whole dropping to the lower reception lines, where they are coupled and form the train, as shown in diagram, ready to depart. The time necessary for this entire work is not much in excess of the time necessary to read this description. During my visit to this yard, a string of cars was delivered to the upper reception lines at 4:40 P. M. At the bottom of the yard, on a departure track, an engine was waiting for its train, scheduled to leave at 5 P. M. The marshalling was done in less than the twenty minutes intervening.

As the entire yard is on a heavy grade, provision had to be made against accident from runaway cars due to errors of switchmen or other causes. At several points on the diagram, plate 2, a chain drag is indicated. This is a simple and effective device designed by Mr. Foetner. The machine consists of a steel hook fixed in a loose socket, working in connection with a semaphore signal. With the signal at danger, this hook stands at the height of a wagon axle, and offers an obstruction to a passing wagon by hooking over the axle. If this hook was fixed, the sudden arresting of the wagon or car would damage the car and drag. To guard against this, a heavy iron chain cable is attached to the hook. The cable rests in an iron box below the track, and when the hook is caught by a runaway car the cable is drawn out of the box and gradually brings the car to a stand without injury. The normal position of this hook is below the axle. There are six of these drags now in service.

"The gradient of these sidings varies according to requirements from 1 in 60 to 1 in 115. * * All the curves are of the same radius (462 feet) so that a shunter in determining the speed necessary for any particular truck, may concentrate his attention upon it, knowing that the resistance of every curve it encounters will be the same."

I find no late statistics concerning movement of cars through this yard. In 1887 50 trains were passed through the yards daily.

The system was designed and executed by Mr. H. Footner, principal assistant engineer of the London and Northwestern Ry.

STATIONS.

The principal feature of the railway passenger stations which recommends itself to the public, is the track and platform arrangement, which is constructed so that passengers in crossing from one track to another must go either over or under, while at a few out stations passengers may pass on tracks at the same level. There is generally no necessity of doing so, and at the principal stations it is not permitted. The platforms are generally built of permanent material, and are raised to the level of the longitudinal step of the carriage.

The tracks are generally protected from the weather by train sheds. The stations of King's Cross, St. Pancras, Euston, Paddington and Charing Cross, London, are admirably arranged for the protection of passengers.

GOODS STATIONS.

The custom of warehousing goods has involved the railways of Great Britain in enormous expenditure of money for the construction of "*Goods Stations*" sufficient not only for the storage of short time freight, but sufficient to store for months, and this, too, with a charge not sufficient to pay for handling.

All freight is received and delivered to these warehouses by the company's force which involves, in connection with the goods station, a considerable stable. While this subject has no direct connection with safety appliances, it is necessary to speak of it to show where a great number of men are employed, and where a great portion of the general expense in construction is incurred. To say that the average cost for Britain's railways is so much per mile, and that so many men are employed, and of this number a certain per cent. are killed or injured implies nothing unless all the conditions attendant upon the service is considered. I have no record of the entire labor roll of the railway system of England, but am able to give some particular figures which may illustrate the general practice.

The freight business of the Lancashire and Yorkshire Railway at Manchester is conducted through two "Goods Stations," Salford and Holdham road. This railway operates 500 miles of double line track and about 27 miles single, and is probably the busiest railway in the kingdom. It would therefore not be proper to assume that the number of employes in the freight department at Manchester would fairly represent the entire railway system of the kingdom. The company's rolls during March, 1892, showed the number of clerks, inspectors, porters, shunters, brakemen, carters, guards and pilot shunters to be 2,098. Of this number 809 were carters or horse keepers having no direct connection with the handling of

trains, and consequently far removed from the attendant danger of train service. About one million tons of freight passed through these stations during year ending December 31, 1891—which was handled by the company's teams for which service 580 horses are in daily service.

The St. Pancras goods station employs 1,800 men, and many other stations in London a like number. The work of a London railway goods station is one of the busiest scenes of London. All the out-freight is handled and despatched to the country at night, and all the in-freight arrives in the early morning. All movement of cars in and about the freight houses is made by hydraulic capstains and ropes. It is usual to find a cross-track cutting the several parallel house tracks, and at the crossings are turn-tables. A car may be wanted on a parallel boy, on the other side of the house, a rope is hooked to it, a turn of the rope around a convenient capstain, a pressure of the foot on the lever, and the car is pulled on to the table and turned, carried across the intervening tracks on the cross-track and turned in on to the desired boy.

Hydraulic lifts are used to lift the car to the different floors of the warehouse, and all storage freight is loaded direct from the floor where it is stored.

COST OF PERMANENT WAY.

The value of the railways of Great Britain, December 31, 1890, as represented by shares, stock, loans and debenture bonds, was \$1,670,339,281.12, or about \$290,000 per mile. The returns from the railways at the same time, indicate an expenditure for maintenance of \$32,349,251.60, or less than \$2,000 per mile. This is probably much less than is expended on many of the trunk lines of the United States.

The Pennsylvania Railroad expended \$1,783 per mile, the N. Y. C. & H. R. R. R. \$2,479, the Boston and Albany \$2,988, the Chicago and Alton \$1,145, Michigan Central \$1,407, Baltimore and Ohio \$1,672, Illinois Central \$734. During the year 1891 many lines in Great Britain show an expense per mile for maintenance greatly in excess of any line in the United States. The Lancashire and Yorkshire with 527 miles, 500 of which is double line, expended \$989,595 for six months ending December 31, 1891, and the budget for the following six months for increased station accommodations, land, new works, etc., called for \$1,385,085. The Midland charged to maintenance of way \$2,362 per mile, the Great Northern \$2,299 per mile, the North Eastern \$1,997 per mile, and the North British \$1,267 per mile. As the accounts are not kept in a uniform manner, it is impossible to make comparisons of value.

SIGNALING.

The first train signal used in England was a horseman proceeding ahead of the train for the purpose of warning all persons off the track. The first important step taken in railway signaling was the introduction of the semaphore signal by Sir Charles H. Gregory in 1841. The introduction of the semaphore signal gave rise to much controversy concerning the

method to be employed, whether the signal should be positive or negative. In negative signaling the normal position is that of caution or that of safety as the practice may be, and the signal is only turned on to danger when specially required for protection. The positive system presupposes the normal state of the signal to be at danger, so that, if the signalman neglect his duty to lower arm, the train is bound to stop.

The positive signal is now generally used in Great Britain, and has been gradually merged into the block system. The absolute block system consists in dividing the road into sections of convenient length and by means of telegraphic, automatic or fixed signals, allowing only one train in a section.

The first movement towards continuous or connected signals was made by the Great Western Railway, which, in 1852, completely fitted its line with distant signals.

Signals were at first connected without any system of interlocking of levers to guard against errors of the signal man. They are said to be connected when they are simply coupled together and are moved simultaneously. This system, while affording much protection, was found to be insufficient for the safe handling of the increased traffic, and it was found necessary to provide some means of providing against the giving of conflicting signals by the operator. This led to the interlocking of the levers controlling the switches and signals. Switches and signals are said to be interlocked when the necessary movement of the switch is completed before that of the signal, and conversely, and when conflicting routes cannot be set up or signaled.

The semaphore style of signal used on the railways of Great Britain has been fixed, by general opinion, and the requirements of the Board of Trade, and as this question has been settled, the question of manipulation is now the only point of difference.

The Regulation of Railways Act, 1889, of the United Kingdom confers upon the Board of Trade power to order certain provisions for public safety. The Board of Trade, in pursuance of such power, has ordered the several railways to adopt the block system upon all the railways mentioned in a certain schedule. This order provides for some modifying conditions, and is issued to each road with regard to the nature and extent of the traffic.

It may be said, however, that all lines of railways in Great Britain are operated under the block system, as the mileage not so operated is too slight to be considered as having any material bearing on the total mileage.

The following tables are given for the United Kingdom, and illustrate the methods and extent of block signaling:

*Comparative Table Showing Block System on Double Line for
years 1889 and 1890.*

TERRITORY.	1889.		1890.		Per centage of double line worked on absolute block system.		Per centage increase in 1890 over 1889.....
	Length of double line opened— miles.....	Distance worked on absolute block system— miles.....	Length of double line opened— miles.....	Distance worked on absolute block system— miles.....	1889.	1890.	
England and Wales.....	8,896	8,701	9,004	8,869	98	98.5	0.5
Scotland.....	1,209	1,205	1,257	1,254	100	100	.....
Ireland.....	601	210	607	216	35	35	.....
Total, United Kingdom.....	10,705	10,116	10,868	10,339	94.5	95	0.5

*Comparative Statement Showing Signal and Point Levers which
are Interlocked.*

TERRITORY.	1889.		1890.		Per centage interlocked.		Per centage increase in 1890 over 1889....
	Interlocked..	Not inter- locked.....	Interlocked..	Not inter- locked.....	1889.	1890.	
England and Wales.....	30,016	1,771	30,854	1,543	94	95	1
Scotland.....	4,519	916	4,804	742	83	87	4
Ireland.....	1,310	865	1,428	762	60	65	5
Total, United Kingdom.....	35,845	3,552	37,086	3,047	91	92.5	1.5

Table Showing the System Used in Signalling the Several Railways in the United Kingdom.

TERRITORY.	Total length of railways open for passenger traffic.		Distance worked by telegraph.				Distance worked by telegraph, but not on either of the foregoing systems.		Distance of single lines (not included in the foregoing columns) worked under the following systems:		Train staff system (No. 3).	
	m. ch.	m. ch.	Absolute block.		Permissive block double		Double	Distance of single line.	System in which only one engine in steam or two or more coupled together are allowed on any portion of the line at the same time	Train porter system No. 2.....	Train staff system (No. 3).	
											Without tickets.	
											With tickets	
England and Wales	9,004.24	4,391.30	Worked by the train staff system in addition	m. ch. 3,122.46	m. ch. 310.21	m. ch. 47.58	m. ch. 13.16	m. ch. 63.69	m. ch. 200.61	m. ch. .67	m. ch. 271.34	m. ch. 66.18
Scotland	1,275.3	1,617.75	Worked without the train staff system	m. ch. 296	m. ch. 306.53	m. ch. 25.64	m. ch. .70	.....	416.63	1.10	363.17	19.61
Ireland.....	607	2,203.67	Double	m. ch. 216.26	m. ch. 575.38	.....	185.71	45.40	202.51	.....	1,319.28	17.72
	10,868.27	8,243.12		10,338.73	3,910.43	73.42	105.37	107.29	808.35	1.77	1,971.56	103.71

The interval between signal cabins is determined by the business. The London and Northwestern, operating 1,800 miles, find it necessary to provide 1,482 signal cabins, from which 17,000 signals are operated. For the operation of these signals, and the switches they indicate, 31,500 levers are used. The Lancashire and Yorkshire, probably the busiest railway in England, operating 527 miles, requires 768 cabins and 15,387 levers. The Midland, Great Western, Great Northern and Southwestern and several other lines are signaled in similar manner, involving an average cost of about \$7,500, provide for construction, maintenance and operation.

The principal cabin of the London and Northwestern at Eaton Station, London, contains 214 working levers and 74 spare spaces. They employ 8 men in the cabin. The Waterloo Station of the London and Southwestern, which has lately been completed, is probably the largest signal cabin in the world, containing 236 working levers, which, with the simplex attachment used in connection with the signal levers, is claimed to equal 380 levers of the ordinary type. The maximum number of trains handled from Waterloo Station before the new plant was completed was in August, 1891, when in one day 823 trains were handled with the new cabin. This number may easily be increased. The number of levers used to manipulate a station, under the system adopted by the Board of Trade, is much in excess of the requirements of the system now in general practice in the United States. The regulations of the Board of Trade require that no facing point switch shall be handled at a distance exceeding 540 feet from the cabin, and as no switch and lock movements are used, it is necessary to provide two levers for each switch movement, one for operating switch and one for locking same. This plan, if pursued on the railroads of the United States, would retard the introducing of interlocking materially.

A case in point, and one with which the Commission is familiar, is the plant at Paducah Junction. At this point the crossings and switches of three roads are controlled from one tower with 34 levers, which, if constructed in accordance with the rules of the Board of Trade of England, would require three cabins and at least 14 additional levers, and two additional sets of operators. The cabins would have to be electrically interlocked and the general cost of the plant increased threefold.

The work put upon the levers in English practice is much lighter than that often found in American practice, and where manual machines are used. The loading of the levers should be carefully considered. The power plant now being largely introduced in America, makes it possible to perform this heavy work safely and quickly and with much less number of levers than is required by the English practice. It will therefore be apparent that the number of levers found in a signal cabin in Great Britain is no proper index of the work performed or the trains passed.

The term interlocking, as used in the United States, generally applies to the protection of grade crossings and junction and involves the movement of what are known as derail points, which provided against the col-

lision of trains at the crossing, and it is in this feature that our practice is contrary to that adopted in Great Britain. While there are few outlying grade crossings in the kingdom, every terminal station passes trains across the current of traffic, and many grade crossings do exist. As facing points are dangerous it is held that to protect the crossing by derails (which are facing points), a collateral danger is introduced which is productive of more accidents than would occur by collision, and consequently high speed routes are signaled over crossings without derails. Derails, or catch points, as they are known, are provided only in low speed routes, or freight tracks. Under this system it will be observed that the protection of grade crossings of high speed routes depends only on the engineer's observance of the signal. In this connection it may be observed that the use of the block system, to a great degree, obviates the necessity of the catch point, for by this means trains are blocked at a distance from a crossing, when opposing route is given. The rules governing the observance of signals are very stringent, and any failure to obey these rules is accompanied by a fine or penalty. There are five distinct signals used.

The first in importance is the *Home Signal*. This signal is fixed as near the signal-cabin as convenient, so that the engineer may be able to communicate with the signal-man while his engine is held at the signal.

The *Distant Signal* is fixed about 1,000 yards from the home signal, and further, if any special conditions, such as a falling gradient, etc., allowed its location. The distant signal is fixed in sight of the home signal. The office of the distant signal is to indicate the position of the home signal in advance, and is distinguished by a notched or fish-tailed end.

Junction Signals perform the same office as home signals, and are fixed near the facing points, which they govern.

Platform Starting Signals are located so as to be seen the entire length of the station platform.

Advance Starting Signals are located at a distance not to exceed 1,050 feet from signal-cabin and in plain view from the cabin.

Signal-cabins are located so that the signal-man may have a clear view of all points and signals actuated from his cabin.

There is no special complication of machinery attending the working of the block system. Each cabin is provided with a simple block instrument, with an indicator, which is actuated by the signal-man on either side of the cabin indicated. The face of this instrument is marked with three points—*Train on Line*, *Line Closed*, and *Line Clear*. The working of these instruments is as follows: A represents Euston Station; B the first block, C the second block; train at Euston ready to start. The signal-man lowers advance semaphore and turns the telegraph indicator to train on line. This moves the indicator in cabin B to indicate train on line. The train proceeds to B, receives signal and goes into second block. The operator sends signal to C, *train on line*, and signals back to A, *line clear*. The

operator at C now controls the signals at B, at danger, until the train has passed C, when he releases B, who can then advance another train to C.

The signal is indicated in cabin by a bell, as well as by the pointer on the face of the instrument. There are many forms of the block instrument, the difference being in detail. The instrument consists of an indicating dial and a commutator handle. The indicator is attached to an axle on which a magnet is centered, being suspended, either within or in close proximity to a coil of silk-covered wire, and deflected either to the left or right, according to the signal required, "positive" or "negative." The commutator is so arranged as to allow the directing of the current at will. The normal position of indicator is "*line closed*" when no current is flowing; connect to the right indicates "*line clear*." With a positive current the indicator points to the left, "*train on line*."

In connection with the semaphore signals, fog signals are necessary, and in times of fog extra men are stationed in pits near the home signal to warn approaching trains. The signal department is one of the most important on the railways of Great Britain.

The force maintained in this department on the London and North-western is an example of the care with which this department is maintained. The system of 1,800 miles "is divided into eleven districts, each of which is in charge of an inspector, these eleven inspectors being assisted by twenty-one sub-inspectors and foremen, and having under their orders sixty-eight chargemen and 430 workmen. The districts are sub-divided into lengths, and each length is placed in charge of a 'chargeman' and an assistant, who visit every signal cabin on their length once a fortnight, clean and oil the fittings of each signal and point, execute any small repairs, or renewals that may be required." In addition to this, a fitter and his assistant visit each cabin once a month, and carefully examine, clean, oil and, if necessary, repair the locking, etc. Heavy repairs and renewals are executed by extra gangs. Besides this force there are at Crewe about 700 men engaged in manufacturing new apparatus, locking frames, levers, signals, etc. This method is carried out on all the principal lines in England, and evidences the close attention given this important feature of railway operation.

Mr. F. W. Webb, M. Inst. C. E., and Mr. A. M. Thompson, M. Inst. C. E., both of the L. & N. W. Ry., have patented a new electric train staff, which is meeting with success and has been approved by the Board of Trade. This machine consists of a cast iron frame about 4 feet high made to receive an iron staff about 18 inches long. The top of the case incloses the locking apparatus which is actuated by electricity controlled from the cabins on either side. Two dials with indicators are fixed on the face of the case, marked as follows: First dial, "*down staff out*" (on left); "*staff in*," (above); "*up staff out*," (to the right). The second indicator is marked, "*staff lock*" on left of center and "*bell signal*" to the right of center. These cases or *beam staff blocks* are located in cabins the same as block signal instruments, and are used for working single lines and are worked as follows: Assume four stations, A, B, C and D; one apparatus

at A, two at B, two at C and one at D, A and D being the termini. The staffs for section between A and B are of a different form to those between B and C, and those between C and D are of a similar form to those between A and B, and so on alternately. Thus a staff sent from A cannot be used by B for the apparatus between B and C. A train is ready to start from A. A calls B by one stroke of bell; B repeats signal to A; A describes train to be sent by usual code for passenger, etc. B acknowledges signal and repeats. A requests permission to withdraw staff from its case by giving six rings to B *and immediately* turns his right hand pointer to "*staff lock*." B acknowledges by turning his right hand pointer over to "*staff lock*" and depresses key "K" at staff lock, holding it down in that position, (*which electrically unlocks the instrument at A and turns the galvanometer needles over in both instruments*). When operator at A sees the galvanometer needle move over, he withdraws the staff and at once turns his left hand pointer over to "*up staff out*" or "*down staff out*," as the case may be, pressing the pointer hand down until he sees his galvanometer needle move to vertical position and also his right hand pointer to "*bell signal*." B, on seeing the galvanometer needle go to vertical position, at once releases the key K and turns his left hand pointer to either "*up staff*" or "*down staff out*" and his right hand pointer to "*bell signal*."

A having the staff now hands it to engineman, which is a clearance order to proceed to B, and so long as his train is in possession of this staff no second staff can be obtained from either instrument, consequently no second train can be dispatched. B on receiving this staff from the engineman will place it in his instrument and ring eight times to A. A will acknowledge signal and will at once turn his instrument to "*staff in*." Both instruments are now at normal position and B is ready to dispatch the train to D. This staff is used to lock the switches. In case the train is required to perform any switching between A and B the switch must be unlocked with the train staff; the opening of the switch locks the staff in the switch stand, and it is necessary to close switch before staff can be removed. This plan insures the closing of all switches and it is said that traffic can be handled with promptness. The system avoids signals and offers an effective means of blocking.

Notwithstanding the enormous investment in signaling on the railways in Great Britain, it seems that many accidents are directly due to failure of the system, due either to carelessness of servant or failure of apparatus. Many collisions occur at junction points, which would in many cases have been obviated had the junction been guarded by derail or catch points.

The secretary of the Board of Trade in closing his annual report for the year 1891, says: "The protection of the public safety which the block system is designed to secure depends for its efficiency on the care, attention and obedience to regulations of several classes of the companies' servants." * * "It is with much regret that I had to refer to a number of accidents attributed to mistakes or neglect of companies' servants."

EQUIPMENT.

The total number of locomotives now in service in Great Britain is 15,545, or about 94 per 100 miles. The total number of locomotives in service in the United States is 33,563, or about 19 per 100 miles.

The cars in freight service in Great Britain number 538,392 or 3,303 per 100 miles, while the United States has but 1,110,286 freight cars, or 657 per 100 miles. The capacity of the freight cars in the United States would, however, about equal that of the lines of Great Britain per 100 miles.

The train loads are much lighter in Great Britain. An American locomotive will pull 13 to 14 hundred tons, while in Great Britain 600 is considered an average load.

Locomotives in Great Britain may be broadly classed in three divisions according to the position of the cylinders.

In the first may be classed those locomotives having cylinders framed under the boilers, transmitting the power directly on the main driving axle which is cranked at two points. This style may be more generally described as inside connected in contradistinction to the second class.

The second class may be designated by the cylinders being fixed at the front end of the boiler outside and below the barrel, and instead of applying the power directly to the axle the piston is connected with a crank pin fixed between the spokes of the driving wheel, in connection with the nave. This is the American type and is used on some lines in Great Britain.

The third class is a change of form of the first class, having a third cylinder below the two high pressure cylinders. This third cylinder is the low pressure cylinder and is of much greater diameter than the two high pressure cylinders. This is known as the compound. This type is now in general use giving economic returns. The "Flying Scotchman" express between London and Edinburgh, is pulled by what is called "the 8-foot single." This is a non-compound locomotive with a single pair of drivers, bogie bunk in front and one pair of trailers. There is no place in this report for a detailed description of the several types of locomotives. The striking features of the machine are the absence of the headlight, pilot, steam dome, sand dome, cab and seats for fireman and engineer. It is held, among the railroad managers in Great Britain, that better results are obtained by requiring the foreman and engine driver to stand at their post. It is certain that the foreman delivers the fuel to his fire-box more regularly, and while bituminous coal is used, no "smoke consumer" attachment is necessary, and little complaint can be justly made of surplus smoke from the locomotive annoying passengers. The traffic is run left-hand and the engine driver is, in some cases, on the left side.

The works of the Great Western at Swindon, employ about six thousand men, the London and North Western, at Crewe, about seven thousand men, the Lancashire and Yorkshire, at Horwich, four thousand men, the Midland, at Derby, employ seven thousand men, the Great Northern, at Doncaster, three thousand men. The construction of the locomotive

at these works is begun with the raw material. Converters and rolling mills, foundries and machine shops convert the raw material into the finished machine, all of the five thousand or more parts of a locomotive are constructed at the company's works, and no outside product is brought in except the copper sheets for the fire boxes. This method, while expensive, provides against faulty material, as the testing laboratories submit all materials to the most exacting tests while in process of manufacture.

The motive power generally is of a high class, simple, plain and well constructed. There are no special safety appliances connected with the locomotive which the American roads do not employ.

It may be interesting to know that the companies mentioned have, in connection with their works, a department for the making of artificial limbs, which are furnished servants injured in the company's service. These artificial limbs are kept in repair and the worthy unfortunates are provided with suitable employment. As artificial limbs are very expensive, and often beyond the purchase by servants of the class most liable to injury, this philanthropic branch of the service is to be commended.

PASSENGER CARS.

Cars or carriages (as they are called) in service in Great Britain number 35,510, or about 211 per one hundred miles; and in this branch of the service is found a radical difference between English and American methods, and in Great Britain the type varies and is, in many cases, fast approaching the American type.

The London and Northwestern Railway, operating 1,716 miles, 1,417 of which is double line, has 4,500 passenger carriages in stock, of which 300 are 42 feet in length, the remainder varying from 33 to 34 feet. Twelve hundred of these carriages are fitted with the Pintch system of compressed gas for lighting. The total passenger capacity of these cars is 164,073, of which 119,500 is third class. A shy and sensitive minority, which represents the titled and wealthy class of Great Britain, prefer a form of carriage which furnishes an opportunity of separating themselves from the general common traveler; a preference for their own society, or that of a select company of fellow-travelers, has been catered to by the railway companies, and in order that each class may be accommodated the carriages have been divided into compartments for what are known as first, second and third-class passengers. The Midland has abolished the second-class ticket and now issue only first and third-class tickets. Some improvement has been made in the third-class compartment in the carriages of The Midland, and much favorable comment has been made by the press on this arrangement. The highest class of carriages on the Great Northern may be taken for the best type of English carriages. This type is known as the composite carriage and consists of one luggage compartment, 4 feet, 1½ inches longitudinal clear space, two first-class compartments with 7 feet clear length each. Between the first-class compart-

ments is a space 4 feet, 1½ inches clear length, divided by a partition into two toilet-rooms, with doors opening inwards from the compartment. These toilet-rooms are fitted with water-closet and basin. Following the first-class compartment is a second-class compartment with 6 feet clear length. The last 6 feet is devoted to third-class passengers.

The first-class compartments are seated for five persons. The upholstering is in broadcloth and is luxurious. The second-class compartments are upholstered in carpet and are comfortable and seat eight. The third-class compartments are not furnished with any comfort, the seats being of plain wood with no covering. Ten passengers are expected to crowd into this limited space of 262 cubic feet. There are no deck lights in these carriages. The ventilation is poor and the lighting not sufficient to read by at night. No means of heating these cars is provided, except the foot-warmers provided for first-class passengers. These foot-warmers are made of copper, in the form of a flat, rectangular tank, about two feet long, one foot wide and three inches high, filled with hot water. Two of these tanks are generally provided at the beginning of a journey and are renewed from time to time. The only warmth obtained from these tanks is for the feet, and it is expected that passengers will provide themselves with rugs and wraps sufficient to sustain animation during a winter's ride.

The experienced traveler generally keeps these alleged warmers under the seat, as they have found by experience that the only office they perform is the promotion of corns and chilblains. The sentiment of the English traveler concerning this method of heating is well expressed in an article of the "Times" of London. During my stay in London the Southeastern Railway placed in its service a train of American cars, from the shops of The Gilbert Manufacturing Company of Troy, N. Y. The train consisted of fine drawing-room cars and one buffet car. These cars were fitted and heated in the usual manner adopted on American roads. Much interest was manifested in this train, and The Times, in describing a journey on this train, from London to Hastings and return, says: "Each of the drawing-room cars has adjoining it a smoking-room of adequate size, occupying nearly one-third of the entire length of the car. Each car, moreover, is warmed with hot-water pipes, supplied by a "Baker heater," the comfort of which, on a bitter day like Wednesday (March 23) might well set the occupants of the special train wondering how ordinary passengers in England, alone of civilized countries, will be satisfied to alternate between freezing with cold and tumbling on their noses over tepid hot-water tins."

Another paper, in describing this train, expresses much pleasure in the hope that the practice of its transatlantic cousins may soon become the general practice on English railways. This paper says: "The coaches are magnificent specimens of carpentry and upholstery work." * * * "The smoothness with which the run was made in the coaches was the subject of general and favorable comment."

The mayor of Hastings said: "They were glad to see the cars, which were an innovation in the right direction."

The Midland, Great Western and London and Northwestern are now experimenting with steam from the engine for heating cars.

Mr. W. M. Acworth, a well known writer on railway subjects, in a late work entitled "The Railways of England," says: "The truth is—and however difficult it may be for Americans to believe the fact, it is undoubtedly the truth—that we maintain, in England, our 'lonesome, stuffy compartments' simply because we like them. For my own part I can honestly say, after a good deal of experience of both kinds of locomotion, that I would rather be 'boxed up' in a Midland third-class than have 'the privilege of enjoying the conversation of the general public' in the most luxurious car that Pullman ever fashioned. I would go further and say that, strange as it may seem to gentlemen who are so delicately nurtured that it makes them uncomfortable to hear that other people are deprived of access to a lavatory for three whole hours, to me the loss of this inestimable boon would be cheaply purchased by the certainty that for three hours one is safely locked in and protected from the babies who squall, and the babies of larger growth who whistle and drum upon the window panes."

Notwithstanding the assertions of Mr. Acworth, it is evident that the sentiment of the English traveler is for the style of cars used in America, and the efforts of the railways are now directed to supply this evident demand.

The opening of the cars on the side, providing one door for each compartment, may be found desirable in this country, where traffic is dense. There is no question but that this means of exit provides for the minimum of delay in receiving and discharging passengers.

The composite car is now made 35 feet long, with three sets of wheels, making six to the car. The wheels in the center of the car cause much jarring. Many cars have but four wheels, while the new carriages on the London and Northwestern are using the American bogie truck.

As the carriages have no entrance at the end, there is no platform at the ends, and the cars are brought within 3 feet, 6 inches of each other. This space is maintained by spring buffers. Seven feet from the end of the car frame is lodged a powerful laminated steel spring, within the frame and extending across the full width of the car. The buffing-rods are carried along under the car at each side and bear upon the ends of this spring; to the center of this spring the draw gear is coupled. By this method the pull of the train through the central draw-bar, and the thrust of the side buffers through the buffing-rods is intercepted and absorbed, and no annoyance is caused passengers by cars being brought violently together. The draw-bar ends in a hook. The coupling is made by two links, connected by a bar, with screw ends. In the middle of this bar another bar of same diameter is joined at right angles on the end of which is cast a ball of iron. When the cars are coupled, by throwing the link

over the opposite hook, the pendant-rod and ball are then moved in a vertical circle, which turns the bar connecting the two links and draws the carriages up to a contact with the spring buffers. The purpose of the ball on the end of the rod is to insure it from being raised and reversed, thus loosening the coupling. It is difficult to explain this coupling without illustration. It forms a simple, close coupling, is cheap, light and easily maintained, and is in general use. This coupling, in connection with the spring buffers is, to my mind, the best feature of the English carriage and might be introduced with profit on American coaches. The weight of the English passenger carriage is from 8 to 15 tons.

It is the practice to run other than passenger cars on a regular passenger train, such as luggage, brake-van, horse box, carriage truck and mail carriages. Eighty-seven per cent. of the passenger cars are fitted with power-brakes. The superior construction of American cars has lately been demonstrated in a terrible accident on the Northeastern near Thrisk, in Yorkshire, by which ten persons were killed and many injured. In this wreck the only car which was not completely demolished was of American manufacture.

FREIGHT OR GOODS WAGONS.

The trains doing freight business are known as goods trains and a variety of cars are used in this service. The goods-train stock comprises platform wagons, (called lories) open and box wagon, covered goods wagon, cattle wagon, sheep wagon, coal, coke, fish, powder, lime and salt wagons, etc.

But little change has been made in the method of constructing goods-wagons since the first design by George Stephenson. The only material change is in the lories, which are now made with removable sides and ends. The majority of goods wagons are open and a tarpauling is used to shelter the goods. The wagons are light, weighing from 5 to 5½ tons, with capacity of from 7 to 10 tons. No solid cast-iron wheels are used on any cars, but the best quality of built up wheels, with steel tires, are used. The goods wagons have but four wheels and are sometimes fitted with spring buffers, the same as passenger carriages. No power brake is used on goods trains, and the only brake provided is a side lever brake, to be used to control cars when shunting. The goods train, therefore, is controlled by the locomotive and rear brake-van. No brakeman is permitted or needed on the cars while train is in motion, and hence the loss of life by falling from cars is reduced to a minimum.

The coupling is performed with a coupling stick. This stick is made with an iron hook in the end. The operator hooks this stick into the coupling link, rests his pole on the buffer rod, which makes the coupling easy and safe. In order to encourage the staff in the use of shunting poles, the companies offer prizes to be competed for yearly by foremen, goods guards, brakemen, yardsmen, shunters and porters, employed in shunting wagons. The prizes vary from 5 to 25 dollars, and are earnestly competed for.

The cost of maintenance of open wagons is much in excess of that of box or covered wagons, being about 7 to 10 per cent. of the first cost for open wagons, against 4 per cent. for box wagons. It is thought, however, that owing to the short haul the advantage in loading and unloading and from open wagons is greater than the additional charge for maintenance. In loading open wagons a frame is generally placed in the bottom, upon which the goods are loaded, and the whole covered with a tarpauling. Upon arrival at its destination, the car is run under a crane and the frame, caught by the four corners, is lifted with its load and transferred to a platform or team-wagon. This obviates the necessity of handling the goods and greatly facilitates business.

ACCIDENTS.

The following table number 4 shows the distribution of men to the various departments of railways in the United Kingdom and the number of fatal accidents and injuries to each class. Total miles, 19,138.

Class of Servants.	Number employed.	Number killed or injured.		Population to the number employed.	
		Killed.	Injured.	Killed.	Injured.
Station masters.....	6,953	3	15	1 in 2,318	1 in 463
Brakemen and guards.....	10,038	56	528	1 " 179	1 " 19
Permanent waymen.....	54,273	136	129	1 " 399	1 " 420
Gate-keeper.....	3,070	5	4	1 " 614	1 " 767
Engine drivers.....	15,180	31	357	1 " 489	1 " 43
Porters.....	38,808	70	438	1 " 554	1 " 88
Shunters.....	5,922	37	400	1 " 160	1 " 15
Firemen.....	14,804	32	414	1 " 462	1 " 36
Inspectors.....	5,226	3	21	1 " 1,742	1 " 249
Pass. guards.....	5,033	8	104	1 " 629	1 " 48
Point and signal men.....	21,153	14	28	1 " 1,511	1 " 755
Laborers.....	28,904	41	120	1 " 705	1 " 241
Ticket collectors*.....	2,410	.....	9	.....	1 " 268
Mechanics.....	64,802	10	25	1 " 6,480	1 " 2,592
Other classes.....	109,050	103	569	1 " 1,059	1 " 192
Total.....	381,626	549	3,161	1 in 695	1 in 121

* Ticket collectors do not ride on train.

The employes killed and injured in coupling and uncoupling cars is comparatively small, being 160 killed and 1,671 injured for year 1891.

The returns made by the railway companies show that 79 persons were killed and 6,440 injured whilst on the premises, or employed in the workshops or warehouses or in loading goods in goods yards, of whom 54 killed and 5,995 injured were servants of companies or contractors. As, however, these casualties cannot be properly considered to have occurred in the course of working of railways, the figures have not been taken into consideration in estimating the danger of railway operation.

The number of deaths chargeable to train service is 12, with 154 injured. The total number of persons killed and injured, including passengers, servants and trespassers, is 1,168 killed and 5,060 injured. As all injuries of the most trivial character are noted, the injury list does not signify the amount of damage.

During the year 1891 there were 845,463,668 passengers carried beside the regular season ticket holders. Of this number all but 1,715 were carried without accident, and but 5 of this number were killed from causes beyond their own control. The proportion of passengers killed *from all causes* was 1 in 8,208 385; passengers injured *from all causes*, 1 in 524,481; the number of passengers killed from causes beyond their own control was as 1 to 169,092,733. This showing is the best ever made. For the year 1881, the proportion was 1 in 27,050,435, the decrease of accident being regular during the decade. The number of train accidents shows a regular decrease from 161 in 1875 to 68 in 1891. Of these 68 accidents 6 were due to imperfect permanent way and works; 4 due to defective equipment; 15 from trains entering stations at too great speed; three due to collisions on same track; 4 due to collisions at junctions; 25 due to *collisions within fixed signals* at stations; 4 to trains being turned into wrong track by signal man, and 4 due to accidents on inclines.

The Statistics dating from 1879 to 1891, inclusive, show that no accidents are chargeable to collisions at level crossings of two railways. The question of signaling level crossings of two railways is referred to under *Signaling*, and it will be observed that derails are not used in high speed routes for the protection of the crossing. The more elaborate method of blocking trains at a distance from the crossing furnishes an effective method of protection. Of the servants killed, 115 were killed while walking on the permanent way and 146 were killed while crossing tracks.

It will be observed from these figures that the fatality attendant upon railway travel and operation is much less in Great Britain than in the United States, and that the ratio of number killed to the number traveling shows a noticeable improvement in the safe transportation of passengers. While all departments of the service have been guarded with more vigilance each year the rapid improvement of the signaling may be justly credited with the greatest protection in travel, and it is to the frequent and dense fogs which occur in England that many accidents are directly traceable, and so long as this trouble exists it will be impossible to continue the high speed of trains without occasional accidents. The public requires fast service and it is remarkable that in the carrying of 169,000,000 passengers but one is killed from causes beyond his own control. High praise is due the careful servant and the excellent works provided for the safe transportation of the millions.

CONCLUSION.

I have given no details of the train service as this is easily found in a "Bradshaw" or in any of the voluminous time-tables of the various companies.

The service is excellent as it is the practice to run frequent trains, with special cars for principal stations on the run. As no conductor or train man is accessible in transit, the passenger must keep watch for the station which is his destination, and much trouble is experienced by persons unfamiliar with the railway. The name of station is called by guard and

porters after the train has stopped, and as the call is generally not plain enough to be understood through the closed doors of the carriage, passengers are frequently carried by their destination. The average speed of trains is greater in Great Britain than in America. The trains are much lighter and more frequent.

Through the kindness of officials I was able to visit the principal works and plants for the manufacturing of signal appliances, and my observations have convinced me of the thorough manner in which each part is constructed. The regulations of the signal department call for the most advanced practice, and no expense is spared to obtain the best. The practice of seeking only the best, regardless of cost, has led to some refinements, the usefulness of which may well be questioned. The practice also tends to an unnecessary amount of material making the work heavy. And while the system now in use on English roads is more complete than may be found on American roads, I am of the opinion that our machinery and methods of signalling, is in some respects in advance of the English, and that the chief difference between English and American practice lies in the expenditure of money and the extension of the system to cover all points. The system of signalling now being introduced on American railways is in many respects superior to the system and machinery used in England. We accomplish better results with less expenditure of time, money and labor, and it will be found that on such railways or portions of railways in the United States where our best system of block signals and interlocking is in service, that the protection of trains is more fully provided for than by any system used in Great Britain.

Our necessity now is, therefore, extension of this practice rather than the invention of a practice.

The railway manager of to-day realizes this as a live question of management, and the growth of signalling is now rapid, and is only limited by the treasury.

I am under many obligations to many railway officials of Great Britain for the universal courtesy and kindness to me. Manager Mercinden, of the Engineering Department of the Board of Trade, and Sir Henry Oakley, General Manager of the Great Northern, gave me such introduction and assistance as enabled me to visit all important points.

Very respectfully,

CHARLES HANSEL.

Consulting Engineer.

No. 2.

PETITION TO DETERMINE PLACE OF CROSSING.

ST. LOUIS & EASTERN RAILWAY CO.,

*Petitioner.**vs.*

TOLEDO, ST. LOUIS & KANSAS CITY RAILROAD CO.,

Respondent.

OPINION OF COMMISSION.

OPINION BY PHILLIPS, *Commissioner*:

This is an application of the St. Louis & Eastern Railway Company for leave to cross with its proposed track the track of the Toledo, St. Louis & Kansas City Railroad Company at a point about three-quarters of a mile east of the station called Peters, in Madison county, Illinois. Respondent resists, alleging that a crossing at the point proposed by petitioner will "unnecessarily impede and endanger the travel and transportation" upon respondent's road.

Respondent, however, offers to allow a crossing at the point proposed, provided petitioner will, at its own expense, set up and maintain interlocking at such crossing; or it offers to permit petitioner to cross without interlocking at a point a little over a half mile further west than the place proposed. Petitioner declines both these offers and insists upon the crossing proposed without interlocking.

Respondent alleges in its answer "that the proposed crossing is at the foot of a working grade of from thirty-five to forty feet to the mile; that the result of such crossing will be to compel all trains upon the Toledo, St. Louis & Kansas City Railroad to stop at the foot of such grade, and thereby lose the momentum necessary to carry trains of ordinary size over such grade;" that a crossing at this point will necessitate diminishing the train load on respondent's road by several cars, thus increasing the expense of operation, as well as delaying and interfering with traffic; and that its management had already decided upon a change of grade at the proposed point of crossing, rendered necessary in the economical operation of its road, which road, it is alleged, is in the course of being reconstructed, this grade being among the last to be changed.

The evidence on which we are asked by petitioner to order this crossing is meagre and unsatisfactory. Two witnesses testified for complainant, stating in terms (without objection) that a crossing at the point proposed "would not unnecessarily impede or endanger the travel and transportation upon respondent's road," and this general conclusion was, in a manner, supported by further expert theoretical testimony given by the same witnesses.

The testimony does not inform us as to the actual state of traffic on respondent's road, how many and what kind and weight of trains it runs, or any other of the many specific facts which might readily have been made the subject of observation and have been put before the Commission. Neither did any witness who had had actual experience in handling engines, or in hauling trains over grades of this kind, testify before us.

We confess to some prejudice in favor of the notion that the best way to prove how the running of freight trains is affected by the grade at the point of proposed crossing, and what freight locomotives can haul there, and what speed and "momentum" must be acquired at that point to insure the ascent of the grade eastward, would be to show what is actually done by the freight trains that daily pass this point and ascend this grade. No evidence on this line was offered.

The expert testimony offered by complainant was controverted by the chief engineer of respondent, whose testimony substantially and very plausibly supports the objections to this crossing stated in the answer of respondent.

The petitioner held the burden of proof and ought to have made clear, by a preponderance of the evidence, the fact that this crossing will not unnecessarily impede and endanger respondent's traffic. This could not be done by witnesses swearing to that *conclusion* in terms as they did. The general conclusion as to the propriety of the crossing is for the Commission, not for witnesses. Actual facts should have been placed before us on which we could judge.

The railroad first upon the ground gains important rights by the fact of its presence. The use of its line ought not to be lightly interfered with. It was undoubtedly in part the object of the Act of 1889, while insuring safety to persons and property transported, to protect established companies in the enjoyment of their rights. One way of arriving at the propriety of a proposed crossing would be to consider whether the line to be crossed would have been built as it is as respects grades, curves, etc., had those building it known a crossing was to be made in the place proposed. Such a test might not be decisive, but is worthy of consideration in every case.

The Act of 1889 took away the arbitrary power of new roads to locate crossings at will; and its effect is to put upon them the burden of showing that the crossing will not "unnecessarily" impede and endanger the travel and transportation upon the road crossed. They should point the Commission a clear way to order the crossing desired with proper regard to existing rights and uses. This we cannot say has been done in the case before us. Giving due force to the testimony, the question remains in serious doubt.

In this case it appears from an unchallenged estimate that the increased expenses of placing the crossing at the point a half mile further west, as contended for by respondent, would be only \$8,594; unless petitioner should be obliged to purchase nine acres of ground between its right of way and the creek on the south, in which case the cost would be increased to \$10,844, estimating this land at \$250 per acre, which is, it seems to the Commission, a very liberal if not extravagant allowance. Thus, we see, the change contended for by respondent does not involve a large outlay by petitioner; and we are unwilling to permanently obstruct or cripple an established line, or to take a serious chance of doing so, where the expenditure of a few thousand dollars will remove all objections.

The petitioning company acquired no equities in the proposed crossing by prematurely grading its road to the point. The correspondence submitted shows the officers of respondent never, expressly or by any fair implication, consented to the crossing unless petitioner would interlock it in the manner stated in the form of contract submitted by them. This is not a case like that of the Chicago, Madison and Northern, where the right of way was acquired and eighty per cent, of the work done before this crossing law was passed. If petitioner, with the law before it, and without either an order of the Commission or the consent of respondent, chose to grade its road for a crossing, it did so on its own responsibility, and at its own peril.

Under the evidence as it stands before us, we are unable to find that a crossing in the place proposed will not, in the language of the Act, "unnecessarily impede or endanger the travel or transportation upon the railway crossed."

It is therefore decided and ordered, that the petitioner, the St. Louis & Eastern Railway Company, have leave, and it is hereby empowered, to cross with its track the main line and track of the Toledo, St. Louis & Kansas City Railroad Company at grade at a point in the N. E. quarter of the N. W. quarter of Section 4, Town 3, North range 8, West of the 3rd P. M., 2,940 feet west of the point named for said crossing in the petition filed in this case.

The point crossing hereby established is marked by the letter "B" upon the plat submitted by petitioner and now with the files in this cause, to which plat reference is hereby made for greater certainty.

It is ordered that petitioner pay all costs and expenses of the Commission incurred under its petition.

SPRINGFIELD, ILLINOIS, January 7, 1891,

No. 3.

COWLES & McKEE,

Complainants.

vs.

CHICAGO, ROCK ISLAND & PACIFIC RY. CO.,

Respondent.

EXTORTION.

Filed May 9, 1891.

Hearing at Chicago, July 29, 1891.

Decision rendered October 7, 1891.

OPINION OF COMMISSION.

OPINION BY PHILLIPS, *Chairman*:

The object of this complaint is to correct alleged extortionate charges for the switching of cars in Chicago. It is alleged the defendant, in January, 1891, put into effect a switching tariff between junction points and the industries upon its line, by which the charge for switching loaded cars between 44th and 22d streets was made four dollars per car, the distance being under three miles, thus exceeding the maximum switching charge for a three mile haul fixed by the Commission. It is further alleged specifically that on May 2d, 1891, car No. 6824 loaded with oats was delivered by the Atchison Company to defendant to be switched from 44th street to complainants' elevator, located at 22d street, the distance being about 13,700 feet, which car respondent refused to switch unless four dollars were first paid for the service, and that a tender of two dollars, the maximum rate, was made to the local agent of respondent which he declined to receive, compelling complainants to pay four dollars.

The switching schedule referred to in the petition does on its face provide rates for switching in excess of the maximum rate fixed by the Commission, which latter is two dollars per car for a distance not exceeding three miles. This maximum, fixed by the Commission, is made by

law *prima facie* a reasonable rate, and any company which charges more must assume the burden of showing in defense, when prosecuted for extortion, that the maximum fixed by the Commission is unreasonable, and therefore not legal and binding. If a company can show this to the satisfaction of jury and court, it can defeat the Commissioners' schedule. It must, however, be noted that no prosecution lies against a railroad company for the simple act of making an improper schedule, or a schedule higher than the maximum fixed by the Commission. Only over acts done, and specific charges demanded, or received, on actual shipments, can avail as evidence in a prosecution for extortion. We might, and no doubt would admonish a company we saw preparing to make illegal charges, but could not prosecute before it had done the act.

Respondent, to the allegation concerning the issuing of this tariff, says it was not intended to make a schedule in defiance of the Commissioners' authority; and certain explanations are given in regard to objectionable portions of the schedule which will appear from the discussion further on.

The important and particular allegation of the complaint concerns car No. 6824 for the switching of which from 44th to 22d street it is alleged four dollars was demanded, the distance being under three miles. This allegation, if proved, would ground a prosecution for extortion. Upon this allegation evidence was heard, and this evidence shows, conclusively, that while the expense bill was made upon this car as from the 44th street yard of respondent, the car was in fact received by respondent at and transported by it from its 51st street yard, which latter yard it is conceded is more than three miles from the complainants' warehouse. The car was taken to the yard at 51st street by the Atchison engineer, as he himself testified without contradiction, and there delivered to respondent. But it is said, in passing to this yard, the car came upon a track of respondent at a point nearer than three miles to complainants' warehouse at 22d street; and it is therefore insisted, that only the distance from such nearer point to the warehouse ought to be considered in determining the length of the haul. This latter position we will now examine.

It is contended that the establishment and operation of different yards by respondent in the city of Chicago as distributing points for different classes of freight and cars is a measure taken merely for the convenience of the company to enable it to handle its business more economically and efficiently, and that since it is possible for the company to deliver cars from the point on its track, nearest the destination to which the car first comes, that point should be taken as the place from which to measure the length of the haul rather than the distributing yard to which the car may go in pursuance of the regulations of the company.

In this view of complainants we are unable to concur. It does not seem to the Commission unreasonable that a railway company doing a large business in a large city should establish distributing points for the different classes of freight or cars which it hauls. Such an arrangement would indeed seem to be imperatively demanded by good railroad practice. It is shown that complainant handles daily in Chicago about 2,000 cars. Without a methodical system of transporting these cars it would be difficult, if not impossible, for respondent to transact its business. Therefore upon this point we must hold the contention of complainants and their counsel not to be sound.

If it were shown by the proof that a car was received by the company at a point nearer than three miles of its destination, and that such car was actually hauled by respondent direct to its destination, a distance of less than three miles, then the mere fact that the company may have a distributing point farther away to which the car might have gone, would not justify the company in charging for the longer distance from this distributing yard which was not in fact traversed; and if such a charge were made, it would constitute, if above the fixed maximum, a *prima facie* case of extortion. Such a case was not made by the proofs under this complaint.

A large number of other switching bills were placed before the Commission at the hearing, though not set forth in the complaint. Many of these, like the bill of car No. 6824, purport to show a haul from 44th to 22d street; others from 16th to 22d street, and perhaps others show hauls between other points, all less than three miles. The officers of respondent in explanation of these bills testified to facts tending to show the actual hauls made may have been, and probably were, different from those stated upon the face of the bills. It was shown the clerk who makes the bills for switching is liable not to know when he writes them where the car was transported from; that the regular course of business, as regard cars to be delivered to industries such as complainants' warehouse, would be, even though the cars were received at 16th or 44th street, to transfer them to the distributing yard at 51st street, from which they would be switched to the destination; and that the economical and proper management of respondent's business imperatively requires that this method should be pursued. The expense bills might therefore show 16th street, or 44th street, when in fact the initial point of the switching service was the yard at 51st street, and the billing clerk might use in the bill the name of the yard into which the car first came.

This testimony as to the course of business pursued by respondent is strongly corroborated by what we know took place in the case of car 6824 mentioned in the complaint. The service in switching this car was described in the expense bill as a haul from 44th to 22d street, but the car was in fact placed by the company bringing it to Chicago in respondent's 51st street yard, and was there received, and from there switched by respondent.

The officers of respondent took the numerous bills of other cars presented and have made a statement to us regarding a small number of them which they were able to trace, showing that like car 6824 the actual haul was over three miles. Shipments shown by a large number of other bills, they report they were unable to trace.

We must not be understood to hold that a railway company may make arbitrary and oppressive arrangements with reference to the distribution and delivery of cars. In adopting methods of business the law would require that the convenience and accommodation of the public should form a chief object. Arrangements needlessly oppressive, having in view only increased revenue, neither justified by the company's necessity, nor required by the public good, would certainly be illegal. In the case before us we do not pass upon the propriety of respondent's distributing yards and methods in general. What we say is that a company may legally systematize its business; and there is nothing before us in this case which proves that respondent in doing so has acted oppressively.

Being satisfied that if all the facts before us were taken into court a prosecution for extortion would not be sustained, we are constrained to dismiss the complaint; but by this action it must not be understood we recede from our established maximum rate for switching, or that we shall shrink from testing this rate by a prosecution, when a case shall be shown to have arisen under it.

The complaint will be dismissed. *

Adopted by the commission, October 7, 1891.

No. 4.

LEAVE TO CROSS

THE JACKSONVILLE, LOUISVILLE & ST. LOUIS RAILWAY CO.,

Petitioner.

vs.

THE WABASH RAILROAD CO.,

Respondent.

PETITION NO. 6, FOR LEAVE TO CROSS.

Petition filed July 18, 1891.—Answer filed July 29, 1891.—Crossing viewed July 30, 1891—Hearing Septem'ber 7, 1891.—Opinion filed and ordered entered October 23, 1891.

OPINION OF COMMISSION.

BY PHILLIPS, *Chairman*:

This is a petition by the Jacksonville, Louisville & St. Louis Railway Company for leave to cross with its track the main track of the respondent, just north of the city of Litchfield, in Montgomery county. A crossing at the point proposed is resisted by respondent upon the ground:

1. That petitioner does not show such ownership or interest in the St. Louis & Chicago Railway, which it operates, as entitles it to ask for the crossing: that its only interest is held under contract with a receiver which may terminate at any time, and will surely terminate when the receiver's functions are performed and he is discharged.

2. That the statute of 1889, under which the proceeding is begun, was intended to meet the case of new lines of road only, and that a crossing sought by an old company in merely changing the location of its lines is not within the purview of the statute.

3. That petitioner shows no public necessity demanding the crossing, but merely seeks to secure its own convenience.

Such, in substance, is our understanding of the points made by respondent.

After carefully considering the evidence and suggestions of counsel, we have arrived at the conclusion that the order for the crossing should be granted. In doing this, we do not judicially determine the questions that have been made by respondent. Not being a court for that purpose, we would be unable to make any adjudication of the questions presented which would be binding upon the parties. The order which we grant in the case is merely preliminary and determines nothing except the propriety of the crossing as affecting the safety and convenience of the public. In other words, the power we exercise as a Commission is one of police regulation only. We do not determine constitutional rights, or construe statutes or laws affecting the building of railroads in general. All the questions that are here sought to be made, can be made in a court competent to decide

them, when the petitioning company goes into court to condemn its right of way across the right of way of respondent. There it can be determined judicially whether the petitioner has such an interest as entitles it to seek this crossing, and it can there also be determined whether, in case it is found to have such an interest, it is otherwise in an eligible position, which involves the other points made. As a mere matter of police regulation, we are not able to see that there is such impropriety in this crossing as would justify its denial, particularly in view of the fact that the petitioning company proposes to interlock the new crossing with suitable appliances, and maintain and operate the interlocking plant without expense to respondent. All the Jacksonville, Louisville & St. Louis traffic that would pass this proposed crossing, now passes over respondent's line at another point where there is no interlocking, and where trains consequently must stop.

It is therefore ordered that the petitioner, the Jacksonville, Louisville & St. Louis Railway Company, have leave to cross with its track the track of the respondent company at the point designated in its petition, to-wit: Nine thousand seven hundred and ten (9710) feet north of the center of the present crossing of petitioner's track and the track of respondent, south of the city of Litchfield, Montgomery county, Illinois, upon condition, however, that the said Jacksonville, Louisville & St. Louis Railway Company will, at its own expense, construct, place in position, maintain and operate at said crossing an interlocking machine such as may be designated and approved by this Commission.

It is further ordered that the petitioning company pay all costs and expenses of this proceeding.

Adopted by the Commission October 23, 1891.

No. 5.

PROTECTION OF CROSSING.

THE CHICAGO AND ALTON RAILROAD CO.,

Petitioner,

vs.

THE ILLINOIS CENTRAL RAILROAD CO. and THE WABASH
RAILROAD CO.,

Respondents.

PETITION NO. 6, PROTECTION OF CROSSINGS AT PADUCAH JUNCTION.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman.*

This is a petition, filed under the interlocking act of 1891, by the Chicago & Alton Railroad Company. The Wabash Railroad Company and the Illinois Central Railroad Company are made defendants in the petition. The prayer of the petition is that this Commission will order the crossing of the main tracks of the three companies named, at what is called Paducah Junction, near Pontiac, in the county of Livingston, to be interlocked.

The companies all agree that the crossing in question is a proper one for interlocking under the statute, and that the Commission may designate the device to be used. They, however, widely disagree as to the basis on which the cost of the interlocking and the expense of its future maintenance and operation shall be apportioned among the companies.

The tracks of the several companies at this place are so located as to form a triangle, each road crossing the other two, thus forming three distinct main track crossings, ranging from six hundred to one thousand feet apart. The Alton tracks extend from northeast to southwest; the Wabash track from northwest to southeast, and the Central track from southwest to northeast. The Alton road is the senior of the three, having been built long before the others. The Wabash is next in point of time, and the Central was built last. The traffic over the Alton at this point is heavy, and it has here a double track. The Wabash runs but three regular trains a day each way over this crossing. The Central also runs three daily trains each way. Upon the south side of the Central track, about half way between the crossing of the Alton and the Wabash, is the Pontiac station building, at which all Central trains stop. There is also upon the line of the Central, a short distance east of its crossing with the Wabash, a coal mine, at which all Central trains stop for coal. The Alton and Wabash trains make no regular stops at this place, except those made for the crossings.

We confess the question of apportioning the cost and expense of this interlocking among the companies has given us much trouble. This and the other cases now under consideration, are the first that have arisen under the statute. It has been insisted that the Commission should, at the outset, lay down some general principle, in accordance with which the cost and expenses of interlocking are to be apportioned under this act, thus making this first batch of cases decisive of all that may hereafter arise. While we recognize that such a method would greatly simplify the subject and save much labor, we see many difficulties in the way of adopting any of the general rules of determination that have been proposed.

It is contended by the Alton company that seniority should solve the whole question. It is urged that the road first upon the ground, which once had the right of way unobstructed by the crossing, should pay no cost or expense, and that the junior road, whose track has been built across that of the senior, thus occasioning the necessity for stopping trains and the danger incident to the crossing, should be compelled to bear the whole burden of protecting the crossing by an interlocking device. It is said that in making contracts for crossings in the present day it is customary to require the junior company to pay all costs and expenses, including the wages of gatemen or flagmen when needed. It is further said that only such matters as were in contemplation when condemnation of right of way across other tracks took place, can be deemed to have been settled by the judgment of the court, and that in the case of these crossings made before interlocking came into use, the burden of equipping with the new appliance should be visited upon the junior company in the same manner that it is customary at the present time to allot expenses by contract.

It is insisted the principle of seniority contended for is recognized in the statute under which this proceeding is had. That statute provides that "in case one railroad company shall hereafter seek to cross at grade with its track or tracks the track or tracks of another railroad company, and the Railroad and Warehouse Commission shall determine that interlocking or other safety appliances shall be put in, the railway company seeking to cross at grade shall be compelled to pay all the cost of such appliances, together with all the expense of putting them in and the future maintenance thereof." It is argued that since, by the terms of this statute, roads causing new crossings are to bear the whole burden, an application of the same principle would require that crossings already in existence should be interlocked upon the same principle, all expense being cast upon the last comer.

The contention of both the Central and the Wabash companies is that first cost of machine should be borne equally, but that the cost of subsequent operation, which is far the most important item, should be apportioned among the companies according to the number of trains which pass over the crossing on each line. This, it is contended, would be equitable for the reason that it would assess the cost and expense upon the basis of benefits. Every stopping of a train entails expense in wear and tear of machinery, in consumption of fuel, and in delay: and from this it is argued that the benefit received by a company is in direct proportion to the number of trains run by that company, and which are relieved, by the interlocking, from the statutory stop. Hence it is said maintenance and operation should be paid for in proportion to the number of trains run.

Another basis which has been propounded to us in another case now before us, and which may be considered here, is that each company should pay both of original cost and expense of operation in proportion to the number of main tracks which it has in use at the crossing. The reasons for such a division have not been very elaborately stated before us. In the particular case where the theory was advanced, we have thought the method did not work any injustice, and have accordingly used it for that case only. (See opinion in *C. & A. R. R. Co. vs. A., T. & S. Fe R. R. Co.*, petition for protecting crossing at Corwith.)

In addition to the above methods we may here name a fourth, which comes to the notice of the Commission by reason of its having been actually used by certain companies in the case of a very complicated crossing at Stewart avenue in Chicago, now being interlocked by agreement of parties. The fourth method is to assess upon each company the cost of that portion of the device which pertains to its own particular tracks and switches. That is to say, each company pays for the construction of its own derails and signals, and for the pipes, attachments, wires, etc., by which the same are operated. Then the cost of the operating machine, tower house, and other general expenses which pertain to all the roads alike, including wages of men, are assessed among the companies on the basis of levers, each road paying that portion of the whole expense which the number of levers required to work its own derails and signals bears to the total number of levers used to operate the entire plant. While none of the counsel in the present case have propounded this latter theory, the Commission, in fact, took it into consideration in connection with all these cases, knowing it had been adopted in practice by several of the best railroad men in the state.

The result of our deliberations is that we find ourselves unable to adopt any one of the rules stated as an unyielding principle of determination for all cases. Some force may be allowed to each of them; but any of them, if universally applied, would, in many cases, work injustice.

Take first the principle of seniority; and here we remark that where condemnation proceedings have been had at the time of establishing the crossing, the damages allowed would, in legal contemplation, cover all injury to the line crossed which could be regarded as proper legal damages. The use declared for across the right of way of the old company would, it seems to us, be such as would call for the allowance of all damages that could in any event arise. We can think of no damage obtainable by condemnation in any case that would not arise by the mere fact of building the one track across the other. It is held, in Illinois, that damages which may accrue from collisions and accidents at crossings are too remote and speculative to form a subject of recovery in condemnation. (*P. & P. U. Ry. Co. vs. P. & E. Ry. Co.*, 105 Ill., 110). So, likewise, it is held that damages which arise from the statutory regulation for the stopping of trains at crossings is not such as the law will recognize (*C. & A. R. R. Co. vs. J. L. & A. Ry. Co.*, 105 Ill., 388); because the statute is said to be a mere police regulation, which may be changed at any time; and no company is entitled to compensation for obeying the law.

Under the authority of these cases it may be questioned whether in condemnation proceedings the cost of interlocking could be considered any more than could the question of the stopping of trains. This Commission now proceeds under the act of 1891, which is purely a police regulation. It is the public interest that is to be subserved in these cases, by lessening the danger to life and property and by expediting travel. Interlocking is a burden cast by the police power of the state upon the companies solely for the public good, not for the pecuniary benefit of the companies themselves. If its cost would not be, in any case, within the purview of condemnation proceedings, it can hardly be contended that priority affects the equities between the companies on the ground stated, that interlocking appliances were not in use when the condemnation was had.

Nor does the contention, in our judgment, derive any additional force from the fact that in the case of the Paducah crossing the lines of the Wabash and the Central crossed by a verbal license from the Alton company without any damage having been paid or any burdens imposed. The Alton could have required condemnation and the assessment of damages if it had seen fit. It did not do this, and we are unable to see that the status of the companies before us is now materially different on that account. Interlocking, it is true, has been recently introduced; a legal method of compelling its use is now, for the first time, pre-scribed by law. This added police regulation is in accordance with the modern tendency alike shown by legislatures and railroad managers to secure greater safety and speed, and generally better railroad practice.

The seniority theory would be wholly impracticable in cities where tracks are concentrated, and where a single interlocking plant may cost from \$50,000 to \$100,000. Here to make the youngest, and presumably the weakest road, pay the whole expense would be little short of ruinous.

For the reasons given, seniority cannot be taken as a basis of determination, discarding other considerations. There may arise cases where it will constitute an element proper to be considered; but, speaking generally, if the Commission finds two railroads in operation upon the ground, without special contract burdens as between themselves, they must be dealt with on a basis of practical equality.

In the proposition to make each company pay in proportion to the number of trains passing the crossing, we see somewhat more equity than we have found in the rule of seniority. But will the train basis do as an infallible principle of determination for all cases? Take the case of a great trunk line, doing a heavy traffic, which has been recently crossed by some new line which does very little business; the one may run a hundred trains per day and the other not more than two. Would not the train basis work a very palpable injustice in such a case? The fact that the junior road has crossed the older road creates the entire necessity for interlocking, and for that necessity the new road is certainly as much responsible as the old one; more so, if its junior position is to have weight. Yet, if the train basis is used, the new road will be practically exempt from operating expense. The fact that one road does a light business does not decrease the cost of the machine to be used, nor the expense of its maintenance and operation. Under this theory of apportioning expenses, if speculators build a new and useless line of road for speculative purposes, as has been too much done in this state, the very fact that the new line is useless and does no business would enable its projectors to compel other companies, which do a substantial service to the public, to maintain and operate interlocking at all the crossings. This would certainly be unjust. The presence of the crossing tracks renders interlocking necessary, and the public benefit arising from increased safety to life and property and greater expedition in travel is the principal fact to be regarded, not the pecuniary benefit to the companies.

Besides, a train basis for apportioning expenses would constantly fluctuate. The time cards of the companies would furnish no adequate basis for such an apportionment, because many roads run more wild trains

than regular ones, and any road may run twice as many trains in one month as it runs in the next.' Under the train basis the question would constantly be open for readjustment, and the uncertain situation in which the order would be left would invite constant wrangling between the companies as to the proportions to be paid.

Under all the circumstances we cannot, therefore, adopt the train basis as a decisive principle to be applied in all cases.

We come now to the proposition to apportion expenses of operation upon the number of main tracks in use by each company at the point of crossing. This it appears to us would in many cases be inequitable. It seems to the Commission only a clumsy way of apportioning expenses upon the volume of traffic, and as such the train basis would be superior to it; and "wheelage" would still better apply the principle underlying this method. Cases no doubt exist where the road with a double track at the crossing point does less actual business than another with a single track. The actual use of a machine, and the activity of those operating it, might be more frequently called forth by a single track road than by a double one. Again, a road might have a thousand miles of double track elsewhere, and, at the particular point of crossing, if in some city or other crowded place, might have a single track.

We can understand that if the tracks, sidings and switches of one company be so arranged that a very large proportion of the cost of the original construction is occasioned thereby, it might be equitable to consider that circumstance in apportioning the original cost of the machine, and also the cost of repairs; but the same reason would not exist in many cases for allowing that circumstance to control the expense of operating. The wages of operators would be the same even though in the course of a day they move a few more levers for one of the companies than for the other. Then, too, the actual working of the machine to accommodate a company's traffic might not bear a direct ratio to the number of protected points on such company's right of way.

If we should apply here the principle of seniority, the Alton would pay nothing. The Wabash could also plead its seniority over the Central, and, carrying the principle to its logical outcome, we should have the Central paying the whole cost and expense of the machine and its operation. It is fair to consider also in this connection that the Central company can, by interlocking, be saved but one stop for its trains, which is that now made by the trains bound eastward before crossing the Alton tracks. All other statutory stops are made by stopping for the station and at the coal chutes. Thus the company which gets the least benefit would pay the whole expense. If we should adopt the train basis for apportioning costs and expenses, we should have the senior road, for which entire exemption is claimed under the opposing theory, paying nearly the whole cost of operation and maintenance. If we should adopt the principle of apportioning according to the number of main tracks, then the Alton would pay one-half of the maintenance and operation and each of the others one-fourth. If we should apportion first cost according to the number of derricks, signals, and their connections actually located on each line, and other expenses according to levers in the tower, as has been done in the crossing agreement for Stewart avenue above referred to, we should then have here again the anomaly of the Central company which derives the least benefit from this machine, paying the largest share both of the cost of construction and of the expense of operation; for according to the plan prepared for this crossing, the Central road has a total of thirteen levers, while the Alton has but twelve, and the Wabash eight. Hence, on this basis, the Central would pay thirteen thirty-thirds, the Alton twelve thirty-thirds, and the Wabash eight thirty-thirds.

Turn which way we may, difficulties are encountered in attempting to apply any one of the principles we have thus had under consideration. At the same time we admit that all of these might properly be considered in cases where they have special weight.

If we were compelled to adopt a rule, to be followed unswervingly in all cases—a thing we should not regard as good policy or as tending to justice—we are free to say, after very careful deliberation, that rule would be to apportion all cost and expense among the several companies whose tracks are involved equally, share and share alike. But since this would, in exceptional cases, work hardships, as is notably the case at the Corwith crossing, now pending before us, we are unwilling to adopt the rule of equality as an inflexible and decisive one, to be applied in all cases. We are, however, convinced that it would be fair to assume, at the outset of every case, that both or all the companies concerned are equal in their liability to bear this new burden, cast upon them by the state, for the public good, in the exercise of the police power. If highly exceptional circumstances exist, which are claimed to be sufficient to take any case out of the principle of equality, it should be for the company claiming the exemption to show these circumstances; but neither benefits nor hardships to companies can receive as large a measure of consideration as the public interest and the public good, which latter it is the great function of this Commission to subserve, and the sole object of this statute to promote.

In the case now under consideration we have concluded the facts do not warrant us in departing from the principle of equal payment by the companies.

An order will, therefore, be entered by the Secretary in this proceeding, providing that the crossing described in the petition, and also the crossing of the Wabash and Central tracks near the other two, be all interlocked by the three companies concerned by means of a single interlocking system, and that each of said three companies pay one-third of the original cost of the device used, and one-third of the expense of the future maintenance and operation of the same.

FINAL ORDER OF THE COMMISSION.

THURSDAY, December 10, 1891.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day—present, Isaac N. Phillips, John R. Wheeler, and J. C. Willis, Commissioners; J. H. Paddock, Secretary, and Charles Hansel, Consulting Engineer—the following proceedings were had in this cause:

And now this petition, having come on for final hearing and determination before the Commission this 10th day of December 1891, and the Commission, having considered the evidence taken herein, the agreements made by the parties through their respective counsel, and the arguments of counsel made before the Commission at a former session, and, being fully advised in the premises, doth find:

That the public good requires that the crossings formed at the said Paducah Junction by the tracks of the Chicago & Alton Railroad Company, the Wabash Railroad Company, and the Illinois Central Railroad Company be protected and operated by an interlocking device or machine: that it would be just and equitable for each of the said three companies to pay one-third part of the entire original cost of such device and its several parts, attachments and appurtenances, and one-third part of the expense of maintaining the same in good repair and order, and, also, one-third part of the expense of operating such device.

It is, therefore, ordered by the Commission that the said companies, to-wit: the Chicago & Alton Railroad Company, the Wabash Railroad Company, and the Illinois Central Railroad Company forthwith proceed to

protect said crossings by an interlocking device of the kind and description shown upon the blue print drawing and plan which is attached hereto, and which is hereby made part and parcel of this order.†

EXPLANATION OF PLAN.

It is further ordered that, for the better understanding of the said plan, the following explanations thereof be observed:

The position of derails is indicated by a shaded point, the location being fixed by measurement, indicated by figures.

Main track routes are governed by the top blade of high semaphore signal, placed on engineman's side of the track, which it governs.

The back-up and switching movements are governed by dwarf semaphore signals.

The distance of signal from point it governs is fixed by figures. Its position may be shifted laterally if the space between tracks is not sufficient to receive the post without danger.

In case it is not desired to operate switches marked on plan as "worked or bolt-locked," then the lower blade governing such switch may be omitted.

GENERAL SPECIFICATIONS.

It is further ordered that the said interlocking device and machine be constructed by said companies in accordance with the following general specifications, to-wit:

1. The switches, derails and signals must be operated from a central tower house, as indicated on blue print plan.
2. All signals must be of semaphore type.
3. All switches and locks must be worked by one-inch iron pipe, plugged and riveted at joints, and carried on anti-friction pipe carriers, fixed on oak posts placed firmly in the ground, not to exceed eight feet apart. Each line of pipe must be automatically compensated.
4. All signals must be worked with two lines of wire.
5. All signal blades must be so constructed as to go to the danger position in case of breakage of connections anywhere between the operating lever and blade.
6. All facing point switches must be fitted with duplex facing point locks.
7. All cranks and pipe compensators must be fixed on foundations firmly imbedded in concrete.
8. All cranks, compensators, chain wheels and main pipe lines must be boxed.
9. All derails and operated switches must be provided with detector bar.
10. All switch points must work on iron plates, so arranged as to keep the track at switch points accurately to gauge.
11. All connections must be accurately adjusted so as to make it impossible to give a clear signal with the switch open or partially open.
12. Each part of the machine and connections must be made sufficiently strong for the work it is to perform.
13. All movements of switches and signals must be made by levers, arranged and interlocked so as to prevent the operator from giving conflicting signals.

†The plan referred to here appears upon the docket in connection with, and as part of, the final order, but it is not practicable to show the same in the printed copies.

14. The material and workmanship must be, in all respects, first-class, and the entire plant must be constructed in accordance with the best practice in signaling, and the plant, as a whole, must, when finished, be complete and perfect, and in every way fit for the purpose of its construction, and all details not herein specified, which may be found necessary to the completeness and efficiency of the machine and plant, shall be supplied by the said companies the same as though they were herein particularly set forth.

15. The machine to be used for the operation and interlocking of the signals, switches and derails must be approved by this Commission before construction is commenced, and the entire plant must be constructed subject to the approval of the Railroad and Warehouse Commission, and permit duly issued, as required by statute, before it is put into operation.

It is further ordered that the said three companies pay equally one-third each of the original cost of the construction of the said device and machine, one-third each of the cost of the future maintenance of said machine in good order and repair, and one-third each of the expense of the operation of said machine.

It is further ordered that the said companies shall construct the said device and machine, and have the same in order and ready for use within ninety days from the entering of this order (December 10, 1891), as provided by statute.

No. 6.

PROTECTION OF CROSSING.

THE CHICAGO, PEORIA & ST. LOUIS RAILWAY CO., THE
CHICAGO & ALTON RAILROAD CO., THE
WABASH RAILROAD CO.

CITATION NO. 4.—PROTECTION OF CROSSING AT JACKSON-
VILLE JUNCTION.

OPINION OF THE COMMISSION.

By PHILLIPS, *Chairman*.

This is a citation issued by the Railroad and Warehouse Commission to each of the three companies named in the title, under the act approved June 2, 1891, commanding said companies to show cause why the crossing formed by their respective main tracks at Jacksonville Junction, Morgan county, Illinois, should not be protected by interlocking or other proper appliances. The counsel of the respective companies appeared before the Commission November 4, 1891, and agreed that the crossing might, by order of the Commission, be interlocked, and that the Commission might fix in the order the kind of device to be used. They further agree that the original cost of the appliance to be used might be assessed upon the companies equally, one-third to each.

These mutual agreements of the companies relieve the Commission from the decision of all questions except that as to the apportionment of the expense of future maintenance and operation. Upon this latter question the Chicago & Alton and the Chicago, Peoria & St. Louis companies, through their respective counsel, agree that the order of the Commission may apportion the expense of operation and maintenance in the same ratio as that of the original cost; namely, one-third to each company.

On this point the counsel of the Wabash Company contends for what would, in the present case, be a slightly different division of the expense of operation. He contends this expense should be distributed in proportion to the number of trains run over the roads respectively. Since, however, it appears from the time cards of these roads on file that the number of regular trains of the Alton and Wabash companies are equal, nineteen each daily, and those of the Chicago, Peoria & St. Louis within one of that number, being eighteen daily, there seems no reason to discuss the feasibility or equity of the train basis for dividing expenses in connection with this citation. The Chicago, Peoria & St. Louis is the company which would profit here by the adoption of the train basis for operating expenses, and that company consents to pay one-third. A letter of Mr. Hayes, general manager of the Wabash, now on file in the case, concedes the propriety in this case on his own basis of assessing the operating expense one-third to each road.

The companies are, therefore, practically at an agreement on the division of expenses for this crossing, though they disagree widely as to what principle should be applied by the Commission generally in such cases. The agreements made contemplate only this particular crossing, and are in the nature of a compromise. This case cannot, therefore, be fairly urged as a precedent, nor can the agreements made be held to estop these companies, or any of them, from maintaining, in other cases, principles which would lead to a different result. We have discussed the different theories held by these companies as to what is a proper basis of distribution of expense in connection with another case now before us, wherein such diverse theories have been insisted upon.†

The payment of one-third of all cost and expense by each company at this place, while finding a sufficient basis in the mutual agreements of the parties, seems to the Commission, at the same time, to be fair, reasonable and just, under all the circumstances of the case.

An order will, therefore, be entered by the Secretary for the protection of said crossing by interlocking, and providing that the original cost, and the expense of future maintenance and operation of said interlocking plant shall be paid for equally by the three interested companies.

FINAL ORDER OF THE COMMISSION.

THURSDAY, December 10, 1891.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day, present—Issac N. Phillips, John R. Wheeler, and J. C. Willis, Commissioners; J. H. Paddock, Secretary, and Chas. Hansel, Consulting Engineer—the following proceedings were had in this cause:

And now this citation having come on to be finally heard and determined before the Commission this 10th day of December, 1891, and the Commission having considered the evidence taken herein, the agreement made by the parties through their respective counsel, and the arguments of counsel made thereon, and being fully advised in the premises, on consideration doth find:

†See opinion in the case of the Paducah Junction crossing.

That the public good requires that the crossing described in the citation be protected and operated by an interlocking device and machine; that it would be just and equitable for each of the three companies named in the citation to pay one-third part of the entire original cost of such machine and its several parts, attachments and appurtenances, and one-third part of the expense of maintaining the same in good repair and order, and also one-third part of the expenses of operating said machine.

It is therefore ordered by the Commission that the said companies, to-wit: The Chicago, Peoria & St. Louis Railway Company, the Chicago & Alton Railroad Company, and the Wabash Railroad Company, forthwith proceed to protect said crossing by an interlocking machine and device of the kind and description shown upon the blue print drawing and plan which is attached hereto, and which is hereby made part and parcel of this order. †

EXPLANATION OF PLAN.

It is further ordered that for the better understanding of the said plan, the following explanations thereof be observed:

The position of derails is indicated by a shaded point, the location being fixed by measurement indicated by figures.

Main track routes are governed by top blade of high semaphore signal placed on engineman's side of the track which it governs.

The back-up and switching movements are governed by dwarf semaphore signals.

The distance of signal from point it governs is fixed by figure. Its position may be shifted laterally if the space between tracks is not sufficient to receive the post without danger.

In case it is not desired to operate switches marked on plan as "worked or bolt-locked," then the lower blade governing such switch may be omitted.

GENERAL SPECIFICATIONS.

It is further ordered that the said interlocking device and machine be constructed by said companies in accordance with the following general specifications, to-wit:

1. The switches, derails and signals must be operated from a central tower house, as indicated on blue print plan.

2. All signals must be of the semaphore type.

3. All switches and locks must be worked by one-inch iron pipe, plugged, and riveted at joints, and carried on anti-friction pipe carriers, fixed on oak posts placed firmly in the ground, not to exceed eight feet apart. Each line of pipe must be automatically compensated.

4. All signals must be worked with two lines of wire.

5. All signal blades must be so constructed so as to go to the danger position in case of breakage of connections anywhere between the operating lever and blade.

6. All facing point switches must be fitted with duplex facing point locks.

7. All cranks and pipe compensators must be fixed on foundations, firmly imbedded in concrete.

8. All cranks, compensators, chain wheels and main pipe lines must be boxed.

†This plan could not be shown on this printed copy, but can be seen on the docket of the Commission.

9. All derails and operated switches must be provided with detector bar.
10. All switch points must work on iron plates, so arranged as to keep the track at switch points accurately to gauge.
11. All connections must be accurately adjusted, so as to make it impossible to give a clear signal with the switch open or partially open.
12. Each part of the machine and connections must be made sufficiently strong for the work it is to perform.
13. All movements of switches and signals must be made by levers, arranged and interlocked so as to prevent the operator from giving conflicting signals.
14. The material and workmanship must be, in all respects, first-class, and the entire plant must be constructed in accordance with the best practice in signaling, and the plant, as a whole, must, when finished, be complete and perfect and in every way fit for the purpose of its construction, and all details not herein specified which may be found necessary to the completeness and efficiency of the machine and plant shall be supplied by the said companies the same as though they were herein particularly set forth.
15. The machine to be used for the operation and interlocking of the signals, switches and derails must be approved by this Commission before construction is commenced; and the entire plant must be constructed subject to the approval of the Railroad and Warehouse Commission, and permit duly issued, as required by statute, before it is put into operation.

It is further ordered that the said three companies pay equally, one-third each, of the original cost of the construction of the said device and machine, one-third each of the cost of the future maintenance of said machine in good order and repair, and one-third each of the cost of the operation of said machine.

It is further ordered that the said companies shall construct the said device and machine and have the same in order and ready for use within ninety days from the entering of this order (December 10, 1891), as provided by statute.

No. 7.

PROTECTION OF CROSSING.

THE CHICAGO & ALTON RAILROAD CO.,

vs.

THE CHICAGO & WESTERN INDIANA RAILROAD CO., THE BELT
RAILWAY CO., OF CHICAGO, LESSEE, AND THE AT-
CHISON, TOPEKA & SANTA FE RAILROAD CO.

PETITION NO. 1, PROTECTION OF CROSSING NEAR HAW-
THORNE.

Citation No. 5—Protection of Crossing of Chicago & Western Indiana Railroad, the Belt Railway Company of Chicago, lessee, and the Atchison, Topeka & Santa Fe Railroad, near Hawthorne, Consolidated.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman*.

This is a petition, by the Chicago & Alton Railroad Company, to interlock the crossing of its tracks with the tracks of the Chicago & Western Indiana Railroad Company, operated under lease by the Belt Railway Co. of Chicago.

The Belt and Western Indiana Companies are made parties defendant in the petition.

The crossing sought to be interlocked is in the city of Chicago. The tracks of the Alton, at the point of crossing, run parallel with the Illinois & Michigan Canal on the south side. Parallel with the canal upon the other side run the tracks of the Atchison, Topeka & Santa Fe Railroad Company. These parallel lines of the road—the Alton and Atchison—are about five hundred feet apart, and they are both crossed by the tracks of the Western Indiana Company. Deeming it impracticable to interlock one of these crossings without including the other in the same system, the Commission, after the petition in this case was filed, of its own motion, issued a citation directed to the Atchison Company, and also to the Western Indiana and Belt Companies, commanding them to show cause why they should not interlock the crossing of their tracks upon the other side of the canal. This citation has, by agreement of all the parties, been consolidated with the petition in this case, so that we have the whole question of interlocking both crossings now before us.

We have discussed, in the case of the Paducah Junction crossing, the different theories advanced for the apportionment of cost of construction and expense of maintenance and operation, and it is unnecessary to repeat here what has been there said.

The Western Indiana Company here crosses with its tracks two other roads. It has a double track: the Alton crossed by it has also a double track, and the Atchison is now constructing a double track, and consents that the case may be considered upon the basis of its having the same completed. It is expected, we believe, that the second track of the Atchison Company will be completed by the time this interlocking is ready for use.

There are a switch and signal which add two levers in the tower, and are located between the tracks of the Alton and the Atchison, upon one of the Western Indiana tracks. These appliances are not essential to the interlocking of the crossing, but are put in, we learn from the Consulting Engineer, at the request of the Western Indiana and Belt Companies for their exclusive accommodation. So far as the other companies are concerned, the crossings could be perfectly interlocked without these appliances. We, therefore, think it not unjust to charge the extra cost of these particular appliances to the Western Indiana and Belt Companies. Without these, the number of switches, signals and levers would be exactly equal upon all these lines. Apportioning first cost upon levers, which, under the circumstances, we think would be just, the Chicago & Western Indiana and the Belt Companies would pay four-tenths of the first cost, the Chicago & Alton three-tenths, and the Atchison three-tenths. We think such an apportionment of the first cost of the plant would be fair under the circumstances.

A question arises here, which had no place in the Paducah Junction case, and that is as to whether existing contract burdens for watchmen and gate-keepers should be continued upon the companies that now sustain them when interlocking is introduced, which takes the place of flagging and the operation of gates. It appears that, by contract, the Western Indiana and Belt Companies are bound to maintain gatemen at their crossing with the Alton, and that the Atchison, by a like contract, is bound to maintain gatemen at its crossing with the Western Indiana and Belt upon the other side of the canal. We have before us the affidavit of Mr. Thomas, President of the Belt Company, showing that he now pays two men at the rate of \$55 per month each, at the crossing of the Alton: but the affidavit also shows a station is maintained there, and, therefore, the company keeps telegraph operators at that place, who command higher wages than could be earned by a man competent only to manage the gates. He swears that suitable men could be procured at \$40 per month each for the work contracted with the Alton to be performed. As it would require a day man and a night man, it would therefore be

necessary, according to Mr. Thomas' affidavit, for the Western Indiana and Belt Companies to expend \$80 per month for the guarding of this crossing, in accordance with the contract with the Alton.

We have before us the affidavit of Mr. Nixon, of the Atchison, showing what the Atchison pays for help at the other crossing, in which affidavit he estimates that \$65 per month would be sufficient to procure the services called for by the contract of the Atchison with the Belt and Western Indiana Companies. Evidently it would cost as much at one place as it would the other, they being only a few hundred feet apart, and the services required being the same in both cases. We are therefore inclined to adopt the statement of Mr. Thomas as to the contract obligation, namely, \$80 per month, or \$960 per year for each crossing. Such wages should be paid as will command efficient service. These contract burdens were assumed by these companies severally in order to obtain their crossings, and the Commission see no reason why the burden should not be continued after interlocking is adopted. The interlocking dispenses with the necessity of keeping gatemen or flagmen, and the work is performed by the interlocking machine much more satisfactorily and with much more benefit to the companies than it could be done in the old way. It is therefore the opinion of the Commission that these burdens should be continued and applied to the operation of the interlocking plant so far as they may be needed for that purpose.

An order will therefore be entered in this case providing that the two crossings mentioned in the petition and in the citation shall be interlocked in a single system; and that of the original cost of the construction of such interlocking plant, the Western Indiana and Belt Companies shall pay jointly four-tenths, the Alton Company three-tenths, and the Atchison Company three-tenths; that the expense of maintaining said interlocking machine and plant in good order and repair shall be paid by the said companies in the same proportion; that of the cost of operating the said interlocking machine the Western Indiana and Belt Companies shall jointly pay one-half thereof, up to the point where said one-half may reach the sum of \$80 per month, or \$960 per year, and the other half of the expense of such operation shall be paid by the said Atchison Company, up to the point where the said Atchison's one-half shall reach the sum of \$80 per month, or \$960 per year, and in case the cost of operation of said interlocking plant shall exceed the aggregate of the sums so ordered to be paid by the Western Indiana and Belt Companies and by the Atchison Company, to-wit: the sum of \$160 per month, or \$1,920 per year, then the order shall provide that the excess over and above that amount shall be paid equally by the three companies concerned.

FINAL ORDER OF THE COMMISSION.

THURSDAY, December 10, 1891.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day, present—Isaac N. Phillips, John R. Wheeler and J. C. Willis, Commissioners; J. H. Paddock, Secretary, and Chas. Hansel, Consulting Engineer—the following proceedings were had in this cause:

And now this petition and citation, consolidated by a former order of the Commission, having come on to be finally heard and determined by the Commission this 10th day of December, 1891, and the Commission having considered the evidence taken therein, the agreements made by the parties through their respective counsel, and the arguments of counsel made before the Commission at a former session, and the Commission being fully advised in the premises, on consideration doth find:

That the public good requires that the crossings described in the said petition and citation be protected and operated by an interlocking device; that it would be just and equitable for the companies named in said petition and citation to pay for the original cost and future maintenance of said device, as follows:

The Chicago & Western Indiana Railroad Company and the Belt Railway Company of Chicago, lessee, four-tenths; the Chicago & Alton Railroad Company three-tenths, and the Atchison, Topeka & Santa Fe Railroad Company three-tenths; and that it would further be just and reasonable, in view of the burdens for gatemen now resting upon certain of them by contract, that the expense of the operation of said device should be paid for by said companies as follows:

The said Chicago & Western Indiana Railroad Company, and the said The Belt Railway Company of Chicago, lessee, to pay one-half of said operating expense, up to the point where the same shall reach the sum of \$80 per month, or \$960 per year; the said Atchison, Topeka & Santa Fe Railroad Company to pay the remaining one-half of such operating expense, up to the point where the same shall reach a like sum of \$80 per month, or \$960 per year; and of the expense of such operation, if any, over and above the sum of said payments so to be made, to-wit: \$160 per month or \$1,920 per year, the said Chicago & Western Indiana Railroad Company, and the said The Belt Railway Company of Chicago, lessee, to pay one-third thereof, the said Chicago & Alton Railroad Company one-third thereof, and the said Atchison, Topeka & Santa Fe Railroad Company one-third thereof.

It is therefore ordered by the Commission that the said companies to-wit: The Chicago & Western Indiana Railroad Company, and the Belt Railway Company of Chicago, lessee, the Chicago & Alton Railroad Company, and the Atchison, Topeka & Santa Fe Railroad Company, proceed to protect said crossings by an interlocking device, of the kind and description shown upon the blue print drawing and plan which is attached hereto, and which is hereby made part and parcel of this order.†

EXPLANATION OF PLAN.

It is further ordered that, for the better understanding of the said plan, the following explanations thereof be observed:

The position of derails is indicated by a shaded point, the location being fixed by measurement, indicated by figures.

Main track routes are governed by top blade of high semaphore signal, placed on engineman's side of the track, which it governs.

The back-up and switching movements are governed by dwarf semaphore signals.

The distance of signal from point it governs is fixed by figures. Its position may be shifted laterally if the space between tracks is not sufficient to receive the post without danger.

In case it is not desired to operate switches marked on plan as "worked or bolt-locked," then the lower blade governing such switch may be omitted.

GENERAL SPECIFICATIONS.

It is further ordered that the said interlocking device and machine be constructed by said companies in accordance with the following general specifications, to-wit:

1. The switches, derails and signals must be operated from a central tower house, as indicated on blue print plan.
2. All signals must be of the semaphore type.

†This plan can be seen attached to the docket, but the same cannot be shown here.

3. All switches and locks must be worked by one-inch iron pipe, plugged and riveted at joints, and carried on anti-friction pipe carriers, fixed on oak posts placed firmly in the ground, not to exceed eight feet apart. Each line of pipe must be automatically compensated.

4. All signals must be worked with two lines of wire.

5. All signal blades must be so constructed as to go to the danger position in case of breakage of connections anywhere between the operating lever and blade.

6. All facing point switches must be fitted with duplex facing point locks.

7. All cranks and pipe compensators must be fixed on foundations firmly imbedded in concrete.

8. All cranks, compensators, chain wheels and main pipe lines must be boxed.

9. All derails and operated switches must be provided with detector bar.

10. All switch points must work on iron plates, so arranged as to keep the track at switch points accurately to gauge.

11. All connections must be accurately adjusted so as to make it impossible to give a clear signal with the switch open or partially open.

12. Each part of the machine and connections must be made sufficiently strong for the work it is to perform.

13. All movements of switches and signals must be made by levers, arranged and interlocked so as to prevent the operator from giving conflicting signals.

14. The material and workmanship must be, in all respects, first-class, and the entire plant must be constructed in accordance with the best practice in signaling, and the plant, as a whole, must, when finished, be complete and perfect and in every way fit for the purpose of its construction, and all details not herein specified, which may be found necessary to the completeness and efficiency of the machine and plant shall be supplied by the said companies, the same as though they were herein particularly set forth.

15. The machine to be used for the operation and interlocking of the signals, switches and derails must be approved by this Commission before construction is commenced; and the entire plant must be constructed subject to the approval of the Railroad and Warehouse Commission, and permit duly issued, as required by statute, before it is put into operation.

It is further ordered that the said companies pay the cost of the original construction and of the maintenance of said device as follows:

The Chicago & Western Indiana Railroad Company, and The Belt Railway Company of Chicago, lessee, shall pay four-tenths thereof, the Chicago & Alton Railroad Company shall pay three-tenths thereof, and the Atchison, Topeka & Santa Fe Railroad Company shall pay three-tenths thereof; and of the expense of the operation of said device when complete, the said Chicago & Western Indiana Railroad Company, and the said The Belt Railway Company of Chicago, lessee, shall pay one-half thereof, up to the point where the same shall reach \$80 per month, or \$960 per year, and the said Atchison, Topeka & Santa Fe Railroad Company shall pay the other half of said expense of operation up to the point where the same shall reach the sum of \$80 per month, or \$960 per year; and of the expense of operation over and above the sum of the two amounts so provided to be paid, if any, the said Chicago & Western Indiana Railroad Company, and the said The Belt Railway Company of Chicago, lessee, shall pay one-third of such excess, the said Chicago & Alton Railroad Company shall pay one-third thereof, and the said Atchison, Topeka & Santa Fe Railroad Company shall pay the remaining one-third of such excess.

It is further ordered that the said companies shall construct the said interlocking device and have the same in order and ready for use within ninety days from the entering of this order (December 10, 1891), as provided by statute.

No. 8.

PROTECTION OF CROSSING.

THE CHICAGO & ALTON RAILROAD CO.,

Petitioner.

vs.

THE ATCHISON, TOPEKA & SANTA FE RAILROAD CO.,

Respondent.

PETITION NO. 2, PROTECTION OF CROSSING AT CORWITH.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman.*

This is a petition, by the Chicago & Alton Railroad Company, for an order to compel the Atchison, Topeka & Santa Fe Railroad Company to join the petitioner in interlocking the crossing of the tracks of the two companies at Corwith, in Cook county. The location of the tracks of the Atchison company at this point are peculiar. The Alton has two tracks running parallel with the Illinois & Michigan canal and immediately upon the south side thereof. The Atchison has, or will have, two main tracks also running parallel with the canal upon the north side. Another main track of the Atchison company, connecting with the Corwith yards and running north and south, passes over the canal and forms a crossing with both the tracks of the Alton and the other tracks of the Atchison. Besides these there is a switch or turn-out of the Atchison extending over the canal and crossing the Alton tracks near the place where the other north and south line of the Atchison crosses them. It is necessary to include both the main track crossings, the turn-out crossing and all the switches in one system of interlocking.

The Alton here, as in the other cases before us, has contended that the entire burden of putting in, maintaining and operating this interlocking should be cast upon the Atchison because it is the junior company. We have disposed of this claim of seniority in our opinion rendered in the case of the Paducah Junction crossing. In the case before us, however, a very large proportion of the cost of the interlocking plant is occasioned by the number and peculiar location of the tracks of the Atchison company, and it would be unjust to compel the Alton company to pay equally with the Atchison under the peculiar circumstances of this case.

The Atchison company contends that the expense of construction, operation and maintenance should be apportioned according to the number of main tracks of each company involved in the crossing, which, in this case,

would be a burden of two-thirds of such expenses upon the Atchison company and one-third upon the Alton company. While we have, in the other case referred to, expressed our dissatisfaction with this basis of apportioning expenses as applied to all cases, yet in the particular case now under consideration we think the result which would be obtained by applying the main track basis would be just and equitable. The Atchison company offers to pay two-thirds of all cost and expense and we are inclined to regard this, under the circumstances, as a fair offer.

Since this case was heard before the Commission the Atchison company has filed a plat or drawing, showing that the projected line of the canal to be built by the Chicago Drainage Commission passes near the proposed crossing of the tracks of these two companies, and, it is said, if the canal is built as this plan indicates, some change may have to be made in the location of the tracks of the Atchison company. We are, however, advised by our consulting engineer that the building of the canal, as proposed, will not necessarily interfere with the interlocking plant required for these crossings; and inasmuch as the digging of the canal is somewhat remote, and may depend upon contingencies, we have concluded not to change the plan of interlocking upon that account. We do not think the proposed canal a sufficient reason for denying the prayer of the Alton's petition.

An order will, therefore, be entered in this case for the interlocking of the system of crossings and switches shown upon the plats that have been submitted and partly described in the petition in this case, which order shall provide that the original cost, expense of future maintenance and the expense of operation shall be paid, two-thirds by the Atchison, Topeka & Santa Fe Railroad Company, and one-third by the Chicago & Alton Railroad Company.

FINAL ORDER OF THE COMMISSION.

THURSDAY, December 10, 1891.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day: present—Isaac N. Phillips, John R. Wheeler and J. C. Willis, Commissioners; J. H. Paddock, Secretary, and Chas. Hansel, Consulting Engineer—the following proceedings were had in this cause:

And now this petition, having come on for final hearing and determination before the Commission on this 10th day of December, 1891, and the Commission, having considered the evidence taken herein, the agreements made by the parties through their respective counsel, and the arguments of counsel made before the Commission at a previous session, and the said Commission, being fully advised in the premises, on consideration doth find:

That the public good requires that the crossing described in said petition, and the other crossing and switches of the Atchison, Topeka & Santa Fe Railroad Company, hereby found to be necessarily involved in the interlocking system, be protected and operated by an interlocking device; that it would be just and equitable for the said Chicago & Alton Railroad Company to pay one-third part of the entire original cost of said device and its several parts, attachments and appurtenances and of the expense in maintaining and operating the same, and for the said Atchison, Topeka & Santa Fe Railroad Company to pay two-thirds of such original cost, and of such expense of maintenance and operation.

It is therefore ordered by the Commission that the said companies, to-wit: The Chicago & Alton Railroad Company and the Atchison, Topeka & Santa Fe Railroad Company forthwith proceed to protect said crossings

by an interlocking device of the kind and description shown upon the blue print drawing and plan which is attached hereto, and which is hereby made part and parcel of this order.†

EXPLANATION OF PLAN.

It is further ordered that, for the better understanding of the said plan, the following explanations thereof be observed:

The position of derails is indicated by a shaded point, the location being fixed by measurement, indicated by figures.

Main track routes are governed by top blade of high semaphore signal, placed on engineman's side of the track, which it governs.

The back-up and switching movements are governed by dwarf semaphore signals.

The distance of signal from point it governs is fixed by figures. Its position may be shifted laterally if the space between tracks is not sufficient to receive the post without danger.

In case it is not desired to operate switches marked on plan as "worked or bolt-locked," then the lower blade governing such switch may be omitted.

GENERAL SPECIFICATIONS.

It is further ordered that the said interlocking device and machine be constructed by said companies in accordance with the following general specifications, to-wit:

1. The switches, derails and signals must be operated from a central tower house, as indicated on blue print plan.
2. All signals must be of the semaphore type.
3. All switches and locks must be worked by one-inch iron pipe, plugged and riveted at joints, and carried on anti-friction pipe carriers fixed on oak posts, placed firmly in the ground, not to exceed eight feet apart. Each line of pipe must be automatically compensated.
4. All signals must be worked with two lines of wire.
5. All signal blades must be so constructed as to go to the danger position in case of breakage of connections anywhere between the operating lever and blade.
6. All facing point switches must be fitted with duplex facing point locks.
7. All cranks and pipe compensators must be fixed on foundations, firmly imbedded in concrete.
8. All cranks, compensators, chain wheels and main pipe lines must be boxed.
9. All derails and operated switches must be provided with detector bar.
10. All switch points must work on iron plates, so arranged as to keep the track at switch points accurately to gauge.
11. All connections must be accurately adjusted so as to make it impossible to give a clear signal with the switch open or partially open.
12. Each part of the machine and connections must be made sufficiently strong for the work it is to perform.
13. All movements of switches and signals must be made by levers, arranged and interlocked, so as to prevent the operator from giving conflicting signals.

†For plan referred to, see docket of the Commission.

14. The material and workmanship must be, in all respects, first-class, and the entire plant must be constructed in accordance with the best practice in signaling, and the plant, as a whole, must, when finished, be complete and perfect, and in every way fit for the purpose of its construction, and all details not herein specified, which may be found necessary to the completeness and efficiency of the machine and plant, shall be supplied by the said companies the same as though they were herein particularly set forth.

15. The machine to be used for the operation and interlocking of the signals, switches and derails must be approved by this Commission before construction is commenced, and the entire plant must be constructed subject to the approval of the Railroad and Warehouse Commission, and permit duly issued as required by statute before it is put into operation.

It is further ordered that the said Chicago & Alton Railroad Company pay one-third of the original cost, and of the expense of maintenance, and of the future operation of said device; and that the said Atchison, Topeka & Santa Fe Railroad Company pay two-thirds of such cost and expense.

And it is further ordered that the said companies shall construct the said device and machine and have the same in order and ready for use within ninety days from the entering of this order (December 10, 1891), as provided by statute.

No. 9.

IN THE MATTER OF THE CLAIM OF McCOURTIE, HILL & CO.

OPINION OF THE COMMISSION.

By PHILLIPS, *Chairman*.

McCourtie, Hill & Co. ask the Commission to refund twenty dollars, deposited by them upon their appeal from the grading of four certain cars of oats. The track inspector graded the cars "No. 3 oats." Claimants appealed, insisting the grade should be "No. 3 *white* oats," but the Appeals Committee affirmed the original inspection. A return of fees is sought upon two grounds, namely:

1. That a proper interpretation and application of the printed rule establishing grades of oats would have made the cargo in question "No. 3 *white*."

2. That certain similar oats before inspected for claimants had been graded "No. 3 *white*," thereby giving claimants good cause to believe the grade of the four cars would be changed on appeal, and the claimants, having thus been misled, without their fault, should in equity be repaid their fees.

That part of rule 4, establishing and defining the two grades of oats which are here in question, is as follows:

"No. 3 WHITE OATS shall be seven-eighths white, but not sufficiently sound and clean for No. 2," (meaning No. 2 *white* oats).

"No. 3 OATS shall be all oats that are damp, unsound, dirty, or from any cause unfit for No. 2," (meaning No. 2 oats.)

The oats in question were all white. So far, therefore, as color alone could be decisive, it points to a grading of these oats as "white;" and claimants contend that upon this ground of color the four cars should have been graded as white oats, if graded at all. One question here is, therefore, whether the element of color is by itself decisive of grade.

The words of the above rule for 3 white, "but not sufficiently sound and clean for No. 2," have received an interpretation by the long practice of the department, which can only be understood by recurring to the definition of the grade of No. 2 white, which latter are required to be "seven-eighths white, sweet, reasonably clean, and reasonably free from other grain." The words in the No. 3 rule, "but not sufficiently sound and clean for No. 2," are held to mean that in soundness and cleanness No. 3 shall be but a single degree or point below what is required for No. 2. This clause is not construed, as contended here, to embrace all other oats which are seven-eighths white, and not too unsound and dirty to be graded at all. Such a construction the words might bear, perhaps, if standing alone; but all parts of the rule establishing grades of oats should be construed together; and when it is considered that the definition of "No. 3 oats" embraces "*all* oats" of certain defective qualities, we think the interpretation which the 3 white rule has received in practice is not unreasonable. Oats which are musty, very dirty or unsound are not graded white, even though the color of them is, in fact, such. Such oats, if fit to grade at all, are called "No. 3 oats."

The oats in the four cars of McCourtie, Hill & Co. were musty, so shown to be by the samples produced at the hearing. They had been damp, and, at the date of inspection, were not approximately up in quality to No. 2 white, in soundness and sweetness. Their proper place was therefore in the grade of "No. 3 oats," which, it will be seen from the above rule, embrace "*all* oats" of the character described in it; that is to say, oats of all colors which are "damp, unsound, dirty, etc."

The second ground urged is, that a previous inspection made for claimants of similar oats as "No. 3 white" misled claimants into believing in good faith that the cars in question had been wrongly graded, and hence the fees should in equity be refunded.

It does appear from samples shown at the hearing, that certain musty oats, of perhaps no better quality than these four cars, had previously been graded for claimants as "No. 3 white oats." It is not shown what track inspector did this. The alleged misleading inspection was, however, clearly erroneous, and not in line with the general practice of the department.

It would result in no end of difficulty and confusion, if we should hold, that one inspector is bound to follow the error of another inspector of equal rank, or even that he is bound to follow his own error, if so unfortunate as to make one. The judgment of the track inspector who gave the grade which claimants say they relied upon, is of no higher authority than the judgment of the other track inspector who called these cars "No. 3 oats." If this appeal demonstrates anything, it is that the first inspection was wrong. It is the voice of a tribunal of arbitration provided by law, and its action is conclusive as to the grade of these oats of claimants.

We are sufficiently convinced of the desirability that all inspections should be absolutely correct, if that were possible. So long, however, as the department must rely upon the judgments of fallible men, errors will occur, and will be expected by patrons. The problem is, by wise regulations and proper selection of inspectors, to reduce errors to a minimum. Some hardships would, perhaps, be incident to the best system that human wisdom could devise. Claimants were no doubt led by their experience to believe an appeal would, in this case, be successful: and, if their belief had been based upon a judgment of the same tribunal to which their appeal was taken, instead of being based upon the judgment of a track inspector of no higher authority than the judgment appealed from, there would be better reason to say they should in equity be reim-

bursed. Even then the question would be raised whether the Commissioners, unskilled as they are in the technical requirements of inspection, would be willing, by refunding these fees, to discredit the judgment of the Appeals Committee in a matter peculiarly within the skill and jurisdiction of that committee. The Commission does not hold up either its Appeals Committee or its track inspectors as infallible; but we believe all of them are skillful and conscientious. Unfortunately the grading of grain is not a process which admits of mathematical accuracy. Definitions of grades are after all but words, and words are elastic things. It is less remarkable that errors sometimes occur than that they occur so seldom. If an inspector does err the department cannot undertake to be bound by his error, nor to indemnify those who may be so unfortunate as to rely upon the error as authority.

For the reasons given, the claim has been denied.

Adopted March 2, 1892.

No. 10.

IN THE MATTER OF THE CLAIM OF W. W. HUNTER, FOR ERROR IN CERTIFICATE.

OPINION OF COMMISSION.

BY PHILLIPS, *Chairman*:

This is a claim of W. W. Hunter for \$19.16 damages alleged to have resulted to him from a clerical error in a certain certificate of inspection of a car of oats. The facts out of which the claim arises have been succinctly stated to the Commission by Mr. Price, Chief Inspector, in the following letter:

"CHICAGO, October 23, 1891.

HON. ISAAC N. PHILLIPS, *Chairman Railroad and Warehouse Commission,*
Springfield, Ill.:

DEAR SIR:—I beg to submit herewith, for the consideration of your Honorable Board, a claim for \$19.16 made against the department by Mr. W. W. Hunter. The circumstances are as follows:

Car 5032, C. S. L., was inspected on the C., B. & Q. R. R., September 21, 1891, as No. Two (2) Oats, "Subject to approval on unloading." On the same day, car 5062 was inspected as the same grade, but without the qualification.

By an error in copying, Mr. Fishback left the first car off the books. When a certificate on the car was called for, the number could not be found; but 5062, being so nearly the same number, and agreeing exactly as to date and grade, the natural supposition was that one of the figures was wrong. Some one in the office called up the track men and asked which number was correct. The track men happened to find 5032 first, and reported that such was the number on their books. On the strength of this report the number 5062 was erased and 5032 inserted in its place, but without the limitation.

On the strength of the clear certificate furnished him, Mr. Hunter paid for the car and forwarded it to a customer at Kokomo, Ind. In unloading the grain at that point it was discovered that the car was badly "plugged," and that the oats should have been three (3) oats instead of two (2). The claim of two (2) cents per bushel is a very reasonable one, considering the quality of the oats delivered.

It is impossible to fix the fault definitely upon any person, but at the same time Mr. Hunter has been damaged beyond question by some one or more of the employes of this department. Mr. Fishback erred in leaving the car number off his records. The man also who took the matter up first made an excusable error in jumping at the conclusion that the two cars were identical, while the track men are not entirely blameless, in that they did not, when reporting that they found car 5032 on their books, also report that it was inspected "subject to approval." If this had been done, or if the car had been at first copied as it should have been, Mr. Hunter would have been put upon his guard and a re-inspection ordered which would have developed the true state of affairs, and thrown the blame upon the guilty party.

I know the position in which the Commission and the Department are placed by the opinion of the Attorney General, but I know also that the public confidence in the Department suffers severely whenever we fail in a single instance to make our grades good.

The dissatisfaction among the grain men with what they consider a dishonorable shirking of a plain business responsibility, is growing all the time, and I am forced to take some severe "overhauls" on account of it.

I believe that every man on the Board of Trade, without a single dissenting voice, would uphold the position that such claims as this should be paid from the Department funds, and further, that all such claims should be paid promptly, and such amounts as may be deemed best collected back from the inspectors in error.

I know this matter is considered settled, but I respectfully ask your honorable Board to look carefully into it again and see if there cannot be found some justification for following the long line of precedents and the custom of years, rather than the opinion of the Attorney General, which, while it is doubtless good law, is very prejudicial to the rights of the public and the interest and reputation of the Department.

Respectfully yours,

(Signed)

P. BIRD PRICE,
Chief Inspector.

The reasonings of the Attorney General in the opinion referred to by Mr. Price, taken in their broadest scope, might perhaps exclude a claim of the character here presented, but the claim of Franklin, Edson & Co., on which that opinion was rendered was for the error of an inspector and not a clerk. The inspector graded No. 3 wheat as No. 2; and, it may be added, the error was so glaring as to raise a suspicion of the inspector's good faith.

The statute provides that each track inspector shall execute a bond in the penal sum of \$5,000, conditioned among other things, "that he will pay all damages to any person or persons who may be injured by reason of his neglect, refusal, or failure, to comply with the law and the rules and regulations."

One of the contentions of the counsel of Franklin, Edson & Co., in the case on which the Attorney General's opinion was given, was that the bond required by statute of an inspector is for the protection of the Department itself as well as of patrons. It was contended the commission could pay the claim of Franklin, Edson & Co., and look to the bond of the inspector for re-imbursement. The Attorney General did not, however, concur in this view. He states the liability of the inspectors upon their bonds at page 5 of his opinion, in these words:

"The law requires that he shall be qualified for the duties which he assumes, and his bond is given for the purpose of holding him to the faithful performance of those duties, and to indemnify those who may be injured by his neglect so to do. I note what the claimants and their learned counsel say as to the right to recover on the bond of the assistant inspector (*i. e.* the right of the Commission to recover), but I cannot concur either in the reasoning or the conclusions reached by them. The remedy for the injury of which they complain, must, in my opinion, be found by suit on the bond of the assistant inspector; and this remedy seems to be adequate."

After quoting, and commenting upon the law as to what may properly be included in the estimate of expenses which the Commission is authorized to raise revenues to meet, the Attorney General concludes his opinion in these words:

"I conclude that the statute confers on the Commissioners no authority to use funds collected for the necessary expenses incident to the inspection service in paying claims for injuries *arising from false or erroneous inspection.*" (Page 7).

Evidently the Attorney General meant to give no opinion beyond the case that was before him, that is to say: The case of a claim for the erroneous grading of grain by an inspector who has given bond under the statute. The substantial basis of the opinion, as we understand it, is the fact that in the case of such damages the statute provides injured parties a complete remedy upon the inspector's bond, as such negatives the idea that the Commission was expected to pay them. In other words, the law so specifically and clearly points out another remedy that in the opinion of the Attorney General the Commission is without power to make other provision for payment; and he holds further that the recovery on the bond must be by the injured party and not by the Commission.

As before remarked, this case is not like that of Franklin, Edson & Co. Here the error cannot be distinctly traced to any officer or employé of the department who is required by statute to give a bond. The clerks in the office, where the first mischievous errors arose, do not give bond for the protection of patrons. No remedy is, therefore provided by law for errors made by the Chief Inspector's clerks. Even in the case of those employés who have given bond, we conceive that cases might arise where it would be impossible to trace the error in such way as to furnish to patrons an effective remedy for their injury.

The question is raised whether in such cases this Commission shall leave the patrons of the inspection department without a remedy. Unless the Commission are at liberty to regard damages, arising from errors made by employés who give no bond, as a part of the necessary expenses of the department, patrons will be left without protection. We are advised by the Chief Inspector that to do this tends seriously to discredit the inspection department among its patrons, all of whom insist, with much show of reason, that the department should make its grades good.

It was known when this law passed that fallible men would be employed to do the work of the inspection department, and that the most careful men, when acting under the best devised system, will frequently make mistakes. Would it, then, do any violence to the law, or the intention of its framers, to hold that errors committed by employés, which cause patrons damage, shall, in the absence of other express provision for their payment, be taken and held as a part of the necessary expenses of the inspection department, to be paid as other expenses, and for which revenue may properly be raised from inspection fees? Surely such claims for damages could have been as well foreseen as could bills for the rent of offices, or the pay-roll of employés. Nothing else was to have been expected than that errors would occasionally be made, and that damages to patrons would arise therefrom.

While respecting entirely the Attorney General's opinion, we at the same time realize the necessity so well expressed in the Chief Inspector's letter, of adopting a proper policy for this large department of State work.

We are further influenced by the fact lately so well established that the patrons of the department, those from whom the department derives its revenues, are unanimous in their wish that damages arising from errors may be considered as an expense of the department, and considered in fixing the inspection fees. We are, therefore, constrained to adopt a rule permitting the use of the funds of the department for the purpose of paying such claims for damages as may arise from errors that cannot be distinctly traced to some employé of the department who is required by statute to give a bond. It is to claims arising from errors of this latter class of employés which we believe the Attorney General intended to apply his opinion, and there his opinion will be given full force. As already shown, the case before the Attorney General was for a flagrant error committed by a bonded inspector, and his opinion, like the opinions of courts, cannot have force, and was not intended to have force beyond the class of facts out of which it arose.

It only remains to be said, that this Commission, foreseeing the importance of this question, recommended to the last General Assembly a law authorizing the Commission to pay claims of this kind, and providing also for such a change in the wording of the condition of the inspector's bonds as would enable the Commission in the first instance to settle all damages for errors as well of the inspectors as of clerks, leaving the adjustment of the matter of the employé's liability to be settled between him and the Commission. This law, which we deem to be urgently needed, passed the Senate but died in the House. We hope the next General Assembly may see the importance of enacting a statute relieving this subject from all doubt, and placing the Commission in a position to make good its grades against the errors of all classes of employés.

For the reasons given, the claim of W. W. Hunter, for \$19.16, is hereby ordered to be paid.

Adopted March 3, 1892.

No. 11.

SWITCHING CARS.

OPINION OF ATTORNEY GENERAL HUNT UPON THE LEGAL DUTY DEVOLVING UPON RAILROAD COMPANIES TO SWITCH LOADED AND EMPTY CARS.

CORRESPONDENCE.

TOLEDO, ST. LOUIS & KANSAS CITY R. R.
W. S. WEED, General Freight Agent.

TOLEDO, OHIO, September 22, 1891.

*Mr. J. H. Paddock, Secretary Illinois Railroad and Warehouse Commission,
Springfield, Ill.:*

DEAR SIR:—The question has arisen as to whether or not it is obligatory under the Illinois State law for competing lines at junction points in Illinois to switch loaded cars from a competitor, same to be unloaded on tracks

of the other; also as to placing empty cars of a competitor, to loaded and forwarded *via* the latter. It is claimed that the law only requires the switching of loaded cars for unloading, and that there is no provision for switching empty cars from a competing line to the side tracks of another, to be loaded and forwarded *via* the former. Will you kindly advise fully at your earliest convenience?

(Signed)

Yours truly,

W. S. WEED, *G. F. A.*
D.

OFFICE OF RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, September 24, 1891.

W. S. Weed, Esq., G. F. A., T., St. L. & K. C. R. R., Toledo, Ohio.

DEAR SIR:—Replying to your favor of the 22d inst., I will lay the same before the Commission at its next meeting. In the meantime can you not state a little more specifically the case you present, that is, locating it at the junction point referred to and giving the names of the roads?

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

TOLEDO, ST. LOUIS & KANSAS CITY R. R.
W. S. WEED, General Freight Agent.
TOLEDO, OHIO, September 29, 1891.

Mr. J. H. Paddock, Secretary Illinois Railroad and Warehouse Commission, Springfield, Ill.:

DEAR SIR:—Responding to your favor of the 24th inst., we have no objection to giving you more specific information as to the case we have in mind. At Cowden, Ill., the O. & M. take the stand that while they are required to switch loaded cars from us to be unloaded on their tracks, they do not understand that it is obligatory for them to switch empty cars to their side tracks to be loaded for shipment *via* our line. We would like a full interpretation of the law as it affects the matter of switching at junction points.

Yours truly,

(Signed)

W. S. WEED, *G. F. A.*
D.

Office of RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, ILL., October 8, 1891.

Hon. Geo. Hunt, Attorney General, Springfield, Ill.:

DEAR SIR:—Enclosed I hand you two communications from Mr. W. S. Weed, General Freight Agent, Toledo, St. Louis & Kansas City Railroad Company.

The Commission have adopted the following order in relation thereto:

“Ordered, That the Secretary place the communications of W. S. Weed, General Freight Agent, Toledo, St. Louis & Kansas City R. R. Co., dated September 22 and 29, 1891, in the hands of the Attorney General, with the request that he communicate to this Commission his opinion thereon as soon as practicable.

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

Office of RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, November 5, 1891.

Hon. Geo. Hunt, Attorney General, Springfield, Ill.:

DEAR SIR:—If you will return to me the letters of Mr. W. S. Weed, the Commission will try to formulate an inquiry in regard to the matter which will be perfectly clear.

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

"BLUFF LINE." ST. LOUIS, ALTON & SPRINGFIELD RAILROAD,
JOSEPH DICKSON, Receiver,
SPRINGFIELD, ILL., November 3, 1891.

Mr. J. H. Paddock, Secretary, Springfield, Ill.:

DEAR SIR:—I would respectfully ask your opinion on a matter of switching facilities furnished by one railroad for another. The case on hand is as follows:

At Alton, Ill., the Alton Lime and Cement Works are located on our tracks, and can only be reached by other companies through our switching their cars. This company furnishes lime to the Springfield Gas Company, who have all the shipments routed *via* the C. & A. R. R., notwithstanding the fact that we agreed and are willing to meet any rate the C. & A. R. R. makes.

As this business justly belongs to us, are we compelled to switch the C. & A. cars at Alton, to and from these works, on their paying us the customary \$2 per car switching charge? An early reply will greatly oblige,

Yours respectfully,

(Signed)

F. E. FISHER, *G. F. A.*

Office of RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, November 16, 1891.

F. E. Fisher, Esq., G. F. A., St. L., A. & S. R. R., Springfield, Ill.:

DEAR SIR:—Your communication of the 3d inst. was referred to Chairman Phillips for investigation. As soon as he makes his report thereon I will furnish you with a copy of it.

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

BLOOMINGTON, December 7, 1891.

Hon. Geo. Hunt, Attorney General, Springfield, Ill.:

DEAR SIR—The inclosed letters of W. S. Weed were formerly transmitted to you by the Secretary of the Railroad and Warehouse Commission under order of the Board, which read:

"Ordered, That the Secretary place the communications of W. S. Weed, General Freight Agent, T., St. L. & K. C. R. R. Co., dated September 22 and 29, 1891, in the hands of the Attorney General, with the request that he communicate his opinion thereon as soon as practicable."

Subsequently you returned the letters with a communication saying, in substance, that the questions on which an opinion was desired were not stated in the letters with sufficient particularity for you to give an opinion. Upon receipt of this communication from you the letters were referred to me with the instructions to state the questions to you in such manner as to make them intelligible.

Since that time other communications raising a kindred question have been received from Mr. F. E. Fisher, of the "Bluff Line," which communications I have marked No. 2, and inclose them herewith together with the letters of Mr. Weed, formerly in your hands. I will say that I regard the question raised by these letters as a very important one, and one that is likely to lead to litigation before very long. The question of the legal obligation of a railroad to switch cars for another road, or to switch cars for patrons who may desire it done in those places where no regular switching business is done by any company, is one which, so far as I know, has never been directly settled. Questions of this kind naturally arise in small towns rather than in large ones, for the reason that in large cities there are roads which devote themselves to doing switching business. There is, in the city of Chicago, at least one company, I think, which does nothing else, and in the city of Peoria, the Burlington road has a "switching department." In such places, therefore, there is an agency to do the switching, and questions of this kind do not arise. But Mr. Weed mentions that at Cowden, Ill., the O. & M. draws the line of its legal obligation at the switching of empty cars from its side-track to be loaded for shipment by way of the Clover Leaf Line. The question is, whether under the common law and statutes of Illinois, there is a legal obligation upon the O. & M. to take empty cars from another road and place them at factories or institutions located on its line to be loaded for shipment by way of another line of road.

In the correspondence of Mr. Fisher, you will see that a similar question is raised. He desires to know whether the Bluff Line is under a legal obligation to switch cars for the C. & A. company to and from certain cement works, located on the Bluff Line, the C. & A. road offering to pay the customary two dollars per car for switching charges.

The question is highly important, and the Commission do not feel like guessing it off without full investigation and without taking your opinion, inasmuch as suits may grow out of these questions.

The only case in which this Commission has had occasion to at all consider the question was in complaint No. 64, *Union Brewing Co. v. C. B. & Q.*; but in that case it was unnecessary, as the Commission thought, to decide squarely the question of the legal obligation to switch cars. The question in that complaint was, rather, as to whether a company which did habitually do a switching business could, while switching for some, refuse to switch for others.

I inclose you herewith the printed opinion of the Commission in that complaint wherein you will see on pages 6, 7 and 8, what the Commission have said touching this question. I do not send this to you as an authority at all, but rather as a help to you to understand the point of these inquiries. I will say that the Commission did not make up their minds upon the main question.

It may also make some difference that the parties applying to have cars switched in the cases stated in these letters were other railroad companies, and not an individual patron of the road. Whether this makes any difference or not, I leave you to judge. In the case of the O. & M., the company seems to base its refusal upon a distinction between the switching of loaded cars to their destination and the switching of empty cars to the initial point to be loaded for shipment. This question will, of course, be considered by you.

Very truly yours,

(Signed)

ISAAC N. PHILLIPS, *Chairman, etc.*

NOAH H. PIKE,
Dealer in Lumber and Coal.

CHENOA, ILL., February 1, 1892.

I. N. Phillips, Esq., R. and W. Commissioner:

DEAR SIR:—The first of this year the C. & A. R. R. Company issued orders to their agent here not to do any more switching for me on lumber less than 2.7 cents per 100 lbs., making it cost me for the smallest car (20,000 lbs.) \$5.40, when, as I understand, the price for switching established by the R. and W. Commissioners is \$2.00 per car, the price I have always paid before January 1, 1892.

Can you do anything for me, or have they any legal right to make such a charge?

Hoping to hear from you soon, I am,

Very truly,

(Signed)

NOAH H. PIKE.

THE CHICAGO & ALTON RAILROAD COMPANY,
C. H. CHAPPELL, GENERAL MANAGER.

CHICAGO, ILL., February 4, 1892.

Isaac N. Phillips, Esq., R. R. and W. H. Commissioner, Bloomington:

DEAR SIR:—Your favor of the 3d, addressed to the General Solicitor, inclosing complaint from Noah H. Pike, of Chenoa, regarding switching, has been referred to me.

In reply, I beg to say that if our company has ever done any switching at Chenoa for Mr. Pike, it was all wrong. We do not undertake to furnish terminal facilities for the use of other roads, and we have never authorized any of our agents at junction points to do switching of business arriving by our competitors. If they have done so, it has been done by them without authority from the officers of the company. In a few cases we learned that this was being done, and have given orders putting a stop to it except at the Commissioners' rate for the shortest distance. You can readily see how impossible it would be for us to furnish facilities to do the business of other roads at a switching charge.

This same question was up at Alton some time ago, through Commissioner Wheeler.

Yours truly,

(Signed)

C. H. CHAPPELL.

OFFICE OF RAILROAD AND WAREHOUSE COMMISSION,
BLOOMINGTON, ILL., February 6, 1892.

Hon. George Hunt, Springfield, Ill.:

DEAR SIR:—Under this cover I send you a letter of Noah H. Pike, of Chenoa, Illinois, dated February 1, 1892. Also a letter of C. H. Chappell, General Manager of the C. & A. R. R. Company, dated February 4, 1892.

These letters, you will observe, raise practically the same legal question which the Commission some time since submitted to you, and which you now have under advisement, relating to the legal obligation of railroad companies to switch cars in those places where they have no regular switching department, and where they do not hold themselves out to do, and in fact do not do, a switching business.

I refer you to my letter of December 7, 1891, for an extended statement of the legal questions that are arising concerning switching, and to the correspondence in the O. & M. case and the Bluff Line case, which had been previously submitted to you.

I foresee that this question of the obligation of companies to switch cars is likely to arise in a great many cases in this State in the near future, and I wish to emphasize the importance of taking a proper stand upon it, and hope the subject, when the crowded condition of your office permits, will receive full and careful attention.

Very truly yours,

(Signed)

ISAAC N. PHILLIPS.

JOLIET, WILL CO., ILL., May 26, 1892.

To the Honorable Board of Railroad and Warehouse Commissioners, Springfield, Ill.:

This complaint I wish to file with you for your consideration at your next session.

I am handling coal (car loads only) on commission for the Roanoke Coal Co. Their mines are situated on the Atchison, Topeka & Santa Fe Railway, at Roanoke, Woodford Co., Ill. There being no other railroad at that point we are compelled to ship our coal *via* A., T. & S. Fe Ry. At Joliet I have several industries I supply with coal, situated on side tracks of the C. & A. R. R. Consequently coal shipped to these places has to be switched by the C. & A. after arriving on the A., T. & S. Fe at Joliet, for which services the C. & A. charge one dollar and fifty cents (\$1.50) per car. For years here the C. & A. has switched all coal coming into Joliet *via* other lines, but since the 1st of last April, General Manager C. H. Chappell, of the C. & A., positively refuses to handle my coal, and in one or two interviews I had with him he told me industries on his road *must* buy their coal from mines situated on the C. & A. road. I had contracted last March with some of these firms to supply them with coal for their quarry season, and under the present difficulties with the C. & A. R. R. I cannot meet my obligations, and I am damaged at least \$40.00 per month.

The Michigan Central, the Rock Island, the E., J. & E., and the A., T. & S. Fe Rys. all switch coal in and about Joliet coming from other roads, the C. & A. included, at a rate of \$1.50 per car. The C. & A. will switch any other commodity but draw the line on coal.

Now I submit to your honorable body this question for fair adjustment. Will you, gentlemen, allow the Chicago & Alton R. R. Co. to discriminate against me in this manner? The M. C., the Rock Island and the E., J. & E. railway companies all switch my coal here to industries situated on their tracks for \$1.50 per car, which is the agreed price among all railroad companies here for switching. I am a poor man, striving to make an honest living out of the coal business. Will you allow this C. & A. R. R. Co. to freeze me out, or will you compel them to switch my coal?

(Signed)

LUTHER PENNINGTON.

Subscribed and sworn to before me this 26th day of May, 1892.

Charles F. Blood,

Notary Public.

OFFICE OF
RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, June 8, 1892.

C. H. Chappell, Esq., G. M., C. & A. R. R., Chicago, Ill.:

DEAR SIR:—Enclosed please find copy of complaint filed with the Commission, to which please make answer as soon as possible.

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

THE CHICAGO & ALTON RAILROAD COMPANY,
C. H. CHAPPELL, General Manager.

CHICAGO, ILL., June 13, 1892.

J. H. Paddock, Esq., Secretary Railroad and Warehouse Commission, Springfield, Ill.:

DEAR SIR:—I beg to acknowledge receipt of your favor of June 8th, enclosing complaint of Mr. Luther Pennington, of Joliet, that we refuse to switch coal arriving by Santa Fe road to side-tracks on our line.

In reply, this is the same complaint that has been made at Alton and other places. We do refuse to furnish our terminal facilities for the use of other roads. It is simply confiscation to ask us to do so. If such a rule was made, any new road entering Chicago could build to the city limits and then demand that the older roads do their business at a switching charge. There is no discrimination against Mr. Pennington, we refuse to switch the coal of any dealer in Joliet when arriving by a competing line. If any coal was ever switched for him it was done without the knowledge and against the orders of the management. We expect our competitors to consult their own interest in deciding whether they will switch for us or not. I am not advised that they do switch coal for us at Joliet or not. In framing the Inter-State Law, Congress saw the injustice of allowing competing lines to use the terminals of other companies.

Yours truly,

(Signed) .

C. H. CHAPPELL,
General Manager.

STATE OF ILLINOIS,
OFFICE OF RAILROAD AND WAREHOUSE COMMISSION,
SPRINGFIELD, June 16, 1892.

Hon. Geo. Hunt, Attorney General:

DEAR SIR:—Enclosed I hand you complaint of Luther Pennington, of Joliet, Ill., against the Chicago & Alton Railroad Co., which the Commission have referred to you for your opinion thereon. They desire me to call your attention to the fact that this complaint is in the same line with other complaints referred to you some time ago for an opinion as to the question involved. The Commission desire to know if there is a legal obligation resting upon a railroad company to switch cars for other railroad companies. The Commission also call your attention to the answer of Mr. C. H. Chappell, General Manager C. & A. R. R. Co., giving his reasons why they decline to perform the service of switching at Joliet for other lines.

The Commission will await your decision as to whether the grounds set up in the answer are sound and legal or not.

Very respectfully,

(Signed)

J. H. PADDOCK, *Secretary.*

ATTORNEY GENERAL'S OFFICE,
SPRINGFIELD, June 20, 1892.

Hon. Isaac N. Phillips, Chairman R. W. Commission:

DEAR SIR:—I have the honor to receive for my consideration at the request of the Railroad and Warehouse Commission your favors concerning inquiry of W. S. Weed, as to the duty of the O. & M. Ry. Co., in regard to switching at Cowden, and of F. E. Fisher, as to the duty of the "Bluff Line," at Alton, and the complaint of Noah H. Pike, at Chenoa, against

the C. & A. R. R. Co.; and also a letter from J. H. Paddock, Secretary, enclosing complaint of Luther Pennington against the C. & A. R. R. Co., at Joliet.

While the questions submitted differ in some particulars, they all relate to the subject of switching cars by a railroad company at a junction point, which cars have been or are to be transported over a line of railroad controlled by another company.

In my opinion it is the duty of every railroad company which is doing a general railroad business to haul all cars, loaded or unloaded, properly delivered to it or required to be hauled over its line or a part thereof for the carriage of freight, either for another railroad company or for a private patron.

The railroad company cannot compel the public to patronize its line either by a refusal to deliver cars to another railroad as in the "Bluff Line" case, or by a refusal to receive them, as in the Pennington case at Joliet. The patron may select his carrier, and the railroad company is bound to carry for all those offering freight and demanding service, and cannot discriminate by refusing to carry, on the ground that the commodity would come in competition with like commodities or industries on its own line, or that it would lessen the demand for commodities that might otherwise be carried over its own line.

However, where freight is shipped over one line, I do not think there is any rule of public duty, or any obligation to public carriers that will require another railroad company to transfer cars, either loaded or empty, without compensation.

So in the matter inquired about by Mr. W. S. Weed, concerning the duty of the O. & M. at the junction at Cowden, I am of the opinion that it is the duty of the O. & M. Railway Company to switch empty cars, delivered to it at the junction, to its side track, as requested, to be there loaded for shipment over another line, and to return them to the connecting road, as well as to receive loaded cars to be unloaded at its side track.

In the "Bluff Line" case, I think the shipper may select the line over which he will ship the lime referred to, and if he prefers the C. & A. line, it is the duty of the "Bluff Line" to deliver the cars to the C. & A. as requested, and the "Bluff Line" cannot compel the shipment of the lime over its road by refusing to switch the cars to the other road.

In the matter of the complaint of Noah H. Pike, of Chenoa, it seems that the C. & A. R. R. Co. is willing to do the switching required, and the only question there raised is as to the amount of compensation to be paid. The complaint does not show what the extent or the service is, nor is it material for this office to know; but I am of the opinion that the Commission should ascertain the facts in this respect and should determine what is a reasonable charge for the service required; for that purpose it may be material to ascertain whether the required movement of the cars is such as to amount to a "haul," or is only what is commonly called a "switching" service. As the company acknowledges its willingness to do the switching in moving the cars, and only raises the question of the amount of compensation, this becomes a matter purely for the Commission to determine.

In the matter of the complaint of Luther Pennington, at Joliet, the statement is indefinite as to the distance the cars are required to be hauled by the C. & A. R. R. Company. The railroad company, however, it appears, refuses to haul the cars furnished by Pennington on any terms; and, in this, it seems to me the railroad company refuses to perform a plain duty. The apparent object of the refusal is to compel the purchaser of coal, to whom Pennington desires to deliver it, to purchase coal which shall be shipped over the line of the C. & A. railroad, and from a mine located on that road. The public cannot be coerced in this manner to patronize any particular mine or line of railroad. It is the duty of the company to take the coal offered to it at its junction of another road, to be delivered to another point for the delivery of coal on its road. Whether

the service which it is required to perform is such as to amount to a "haul," or is only "switching," should be determined by the Railroad and Warehouse Commission, and a reasonable maximum charge for such service should also be fixed by that body.

I return herewith the letters, complaints and communications submitted to me by you in relation to the above entitled cases.

I have the honor to be, very respectfully,
(Signed) GEORGE HUNT, *Attorney General*.

No 12.

LEAVE TO CROSS.

THE CENTRALIA & CHESTER RAILROAD CO.,
Petitioner,
vs.

THE LOUISVILLE & NASHVILLE RAILROAD CO.

PETITION FOR LEAVE TO CROSS.

CROSSING ORDER.

BY THE COMMISSION.

The really disputed question here is whether or not petitioner shall be required to interlock this crossing. Having been unable as yet to arrive at a conclusion satisfactory to all of us on this question, and realizing the injustice of longer holding the case, while petitioner is waiting to build its road, we have concluded to enter an order permitting petitioner to cross so the work can be proceeded with, and to reserve consideration of the question of interlocking. By this means the Commission will not lose jurisdiction of this subject, and that deliberation can be had which will insure a more nearly correct conclusion. There are said to be machines in use less expensive and better adapted to a crossing of this kind than the more elaborate appliances commonly in use, and which it would not be onerous upon petitioner to put in at this crossing. We can, while holding the question, investigate these appliances; and in the meantime actual experience arising from use of the crossing may demonstrate more clearly what the public good requires in the premises.

It is ordered that the petitioner, the Centralia & Chester Railroad Company, have leave to cross with its track the track of the respondent, the Louisville & Nashville Railroad Company, at the point mentioned in their petition now on file in this cause.

Ordered further, that this cause be kept on the docket and that the question of the protection of said crossing by interlocking or otherwise be held under advisement.

Adopted March 18, 1892.

INTERLOCKING ORDER.

BY PHILLIPS, *Chairman*.

Upon further consideration of this petition the Commission have arrived at the conclusion that the crossing requires protection by interlocking. It is probable that if in any case the Commission found themselves able, consistently with their views of duty, to permit any new crossing to be formed without the protection of interlocking, this would be such a case. We are, however, firmly convinced that all new crossings at grade hereafter constructed in this State should be protected. A device can be used at the crossing in question, which, it is believed, will not cost to exceed \$1,500. The business of the Centralia & Chester Railroad will probably be light for some time to come, and the distant signals on that road might be dispensed with and an interlocking device adopted and put in, to be operated by the trainmen of the Centralia & Chester road, thus dispensing with the necessity of keeping a force expressly for the purpose of operating this machine. This implies, of course, that the signals on the Louisville & Nashville road be kept set at "advance" in both directions. When a train upon the Centralia & Chester road desires to cross it will be necessary for it to stop at the dwarf home signal, a trainman can proceed to the tower house, reverse the signals and give the Centralia & Chester train the right of way. Then, after the train has passed the home signal upon the other side, the trainman in the tower can again set the signals at "advance" for the Louisville & Nashville trains. By this means the expense of operation could be avoided. Should, however, a plan be adopted which does not contemplate a regular force for operation, it will be absolutely necessary that some employé of the Centralia & Chester Railroad Company be charged with the duty of keeping the machine in adjustment, oiling the same, and cleaning, filling and hanging out the signal lamps.

The above are suggestions which the roads concerned have the power to adopt or not as they choose. Mr. Chas. Hansel, Consulting Engineer of the Commission, has prepared a plan for such a device as we have suggested, a copy of which will be furnished the respective companies upon application.

Should the companies prefer a device of the regular pattern in use, with distant signals upon both roads to be operated by men kept for the purpose, there will, of course, be no objection on the part of the Commission to the adoption of such a device by the agreement of the parties. We should indeed prefer such a device, but have been constrained to make the above suggestions upon the supposition that the new company, the Centralia & Chester, is perhaps not financially in position to put in an expensive machine at this time. Should the business of the Centralia & Chester road increase, and should it be hereafter demonstrated by experience that a more elaborate plant is necessary, high home signals and distant signals can be added on the Centralia & Chester road, and provision be made for the operation of the plant by regular men; and this matter will be within the power of the Commission at any time if application is made by either party in this behalf, or the Commission can proceed of its own motion if the public good is found to require it.

It is ordered that the crossing of the main track of the Centralia & Chester Railroad and the Louisville & Nashville Railroad described in the petition in this cause be, and the same is hereby ordered to be protected by a system of interlocking and switches.

It is further ordered that the petitioner, the Centralia & Chester Railroad Company, shall pay the first cost of the construction and the putting in of such interlocking device, and also the expense of maintaining the same in good order, condition and repair; but the question of apportioning the expense of the operation of said plant is hereby reserved until such time as the device to be used shall have been agreed upon by the parties, or in case of their failure to agree, prescribed by the Commission.

And inasmuch as under the statute the companies are permitted to agree upon a plan of interlocking, provided they can do so, therefore it is ordered that this case be held under consideration by the Commission, pending the efforts of the parties to agree upon a plan.

Adopted June 21, 1892.

No. 13.

LEAVE TO CROSS.

THE TAMAROA & MT. VERNON RAILWAY CO.,

vs.

Petitioner,

THE LOUISVILLE & NASHVILLE RAILROAD CO., AND SOUTH-EAST & ST. LOUIS RAILWAY CO.,

Respondent.

PETITION FOR LEAVE TO CROSS.

OPINION.

BY PHILLIPS, *Chairman.*

This is a petition under the act of 1889, wherein the Tamaroa & Mt. Vernon Railway Company asks leave to cross, with its proposed track, the track of the Louisville & Nashville Railroad Company at a point in the city of Mt. Vernon, Jefferson county, Illinois, about 1,700 feet east of the passenger station of the Louisville & Nashville Company, in that city. Although at the immediate point of proposed crossing the Louisville & Nashville track is practically level, there is a sharp up-grade to the west of the crossing extending to the neighborhood of the passenger station. For a distance of 1,200 feet east or southeast of the proposed crossing, the grade of the Louisville & Nashville road is level, and still farther to the eastward the grade falls. The proposed crossing is on a two degree curve.

Our function under this petition is to prescribe the place and manner of this crossing, the parties not having been able to agree. As to the *manner* of crossing, it is not contended that the same should be constructed otherwise than at grade as proposed. The *place* of crossing is objected to by respondent on account of the down grade from the west approaching the crossing point; but there seems to be no serious contention that a better point, which would at all answer the purpose of the petitioning company, could be selected. At any rate, no sufficient showing is made to justify the Commission in ordering the crossing at a different place from that proposed.

It seems also to be conceded that the Commission should, under the power conferred under the interlocking act of 1891, cause this proposed crossing to be interlocked; and certainly the location and steepness of the grades renders this imperative.

The really controverted question is, whether or not the petitioning company shall pay the entire expense of the operation of the interlocking plant, or whether such expense shall be divided, in the discretion of the Commission, between the two companies. The petitioner's counsel con-

cedes that, under the act of 1891, the petitioner is bound to pay the original cost of the "construction" of the interlocking machine, and also the expense of "maintaining" the same—restricting the latter word to include only such repairs and renewals as the interlocking device may from time to time require. Respondent insists that a proper construction of the statute requires that petitioner, in addition to the cost of construction and the expense of maintaining, should also bear the whole expense of operating the plant after it is completed, meaning by expense of operation the wages of those who work the machine.

The language out of which this question arises occurs in the concluding portion of section 3 of the act of 1891, and is as follows:

"Said commission shall further designate, in such order, the proportion of the *cost of the construction* of such plant, and the *expense of maintaining and operating* the same which each of the companies or persons concerned shall pay. In case, however, one railroad company shall hereafter seek to cross at grade, with its track or tracks, the track or tracks of another railroad company, and the Railroad and Warehouse Commission shall determine that interlocking or other safety appliances shall be put in, the railroad company seeking to cross at grade shall be compelled to pay all cost of such appliances, together with the expense of putting them in and the *future maintenance* thereof."

It will be noted that that portion of this language which relates to crossings already in existence, names three items of expense, namely, "cost of construction," "expense of maintaining," and expense of "operating." The language which refers to those companies which "shall hereafter seek to cross at grade," etc., mentions only "all cost of such appliances, together with the expense of putting them in, *and the future maintenance thereof.*" Undoubtedly the word "maintenance" is broad enough, in its common acceptation, to include the cost of operating the machine. However, to arrive at its meaning in the place where it stands in this section, it is necessary to consider the language used in the preceding part of the section, and there we find the expense of maintaining the plant mentioned as one item of expense, and the expense of "operating" as another. We think the word "operating," so used, designates the wages of such employes as may be needed to control and work the machine in actual use. The legislature having included the wages of operators in a phrase distinct from that of "maintaining" the machine in this same section, we do not feel at liberty, under the well recognized canons of statutory construction, to extend the meaning of the phrase "future maintenance," as subsequently used, so as to include such wages.

We shall enter into no learned disquisition in support of this view, but state it as the conclusion at which we have arrived, and which, we think, would be adopted by the courts, if construing this statute under the long established and well recognized rules of statutory construction.

In case of the interlocking of crossings already existing when the act was passed, a discretion was vested in this commission to apportion cost of construction, expense of maintaining and expense of operation between the companies, as justice might be deemed to require. In the case of crossings afterwards to be constructed, the exercise of this discretion by the Commission was withheld so far as the items of first cost and maintenance are concerned, the legislative discretion having been here substituted through a positive statutory direction. Thus the cost of "operating," meaning, as we view it, the wages of men to operate the machine, is, in the case of new crossings, left unprovided for, and this remains to the reasonable discretion of this Commission.

How shall this undistributed expense be apportioned by us? Left to our judgment in the premises, we confess we could see no good reason to treat expense of operation differently from the other items named; and, perceiving no sound distinction, we might follow the policy of the legislature, and visit the expense of operation also upon the company seeking the crossing. This, however, we are not at liberty to do, because it is the

legislative view, not our own, which we must seek to follow; and, whether we are able to perceive a distinction or not, we must suppose the legislature saw a distinction, otherwise they would have included expense of operation with the other items to be paid by the new comer, which latter, with the subject directly before them for consideration, the law-makers did not do. We therefore conclude the expense of operation should, under the language of this section, be apportioned by us between the companies on such basis as we may deem equitable under all the circumstances of the case.

And it seems not improper to remark here, that when a railroad company lays down its track, it does so as a public agency by virtue of a franchise derived from the State, and which it holds for the public benefit, and subject to such future regulations and burdens, police and otherwise, as may, in the proper care for the public interest, be imposed from the same source. Had the right of way of the first road which crossed Illinois been held by law too sacred to be crossed by the tracks of other roads without the imposition of large burdens based solely upon the advantages of priority in time, it is not difficult to see that the development of the State might have been, by such a policy, seriously retarded.

In the case of the petition of the Chicago & Alton Railroad Company for the interlocking of its crossings with the Illinois Central and Wabash tracks at Paducah Junction, wherein it was urged that the petitioning company was entitled to exemption from cost and expense by reason of its seniority, this Commission observed:

"For the reasons given, seniority cannot be taken as a basis of determination, discarding other considerations. There may arise cases where it will constitute an element proper to be considered; but, speaking generally, if the Commission finds two railroads in operation upon the ground, without special contract burdens as between themselves, they must be dealt with on a basis of practical equality."

The Supreme Court of Illinois, in the case of *Chicago & Alton Railroad Co. vs. Joliet, Lockport & Aurora Railway Co.* 105 Ill. 383, at the particular page 401, discussing the question whether or not the stopping of trains by the senior road at the proposed crossing, as required by statute, could properly be considered as an element of damage in condemnation, speaking through Chief Justice Scott, says:

"Corporations, as well as citizens, are subject to the police power of the State. * * * Should it be held that before a new railroad could be laid across the track of a railroad previously constructed, the damage for any inconvenience such company might suffer on account of having to submit to and observe police regulations in regard to the conduct of its business thereafter should first be ascertained and paid by the new road, it would amount to a practical prohibition of the construction of new railroads in the State. * * *

"Unless, therefore, every railroad corporation takes its right of way subject to the right of the public to have other roads, both common highways and railways, constructed across its track whenever the public exigency might be thought to demand it, the grant of the privilege to construct a railroad across or through the State would be an obstacle in the way of its future prosperity of no inconsiderable magnitude. The claim made for damages, in this respect, has neither reason nor weight of authority for its support. In *Railway v. Railway*, 30 Ohio St. 604, it is well said: 'While the elder road can demand compensation for its property to the extent of its appropriation, it has no right to demand tribute from the junior road for the enjoyment of the same corporate franchises that it possesses. Each owes its authority to operate its road to the same source—the State—and neither has the right to tax the other for the enjoyment of these mutual privileges. It is true that the crossing imposes a new burden, but it is one to which it is subject by the nature of the case and the terms of its charter.' Other courts of acknowledged authority sustain the same general doctrine."

We think these views applicable here, and it is our opinion that since the Legislature left the item of expense of operation for apportionment by the Commission between the companies, it would not be unjust in this case, in view of the fact that all other expenses are cast by law upon the new comer, to require the expense of operating the plant to be paid equally by the companies, which will accordingly be done.

ORDER.

It is ordered and decided that petitioner, the Tamaroa & Mt. Vernon Railway Company, have leave to cross with its track at grade the track of the respondent, the Louisville & Nashville Railroad Company, at the place and in the manner specified in the petition on file in this cause—right of way for such crossing being first obtained under the laws of Illinois relating to Eminent Domain.

It is ordered further that the crossing of tracks to be thus formed, be protected by a system of interlocking signals and switches, to be agreed upon by the parties, with this Commission's approval, if the parties are able to agree, the cost of construction and the expense of maintenance of which device shall be paid for by the Tamaroa & Mt. Vernon Railway Company, as provided by statute; but it is hereby ordered and decided by the Commission that the cost of the operation of such interlocking device, the said Tamaroa & Mt. Vernon Railway Company, petitioner, shall pay one-half, and the said Louisville & Nashville Railroad Company, respondent, shall pay one-half. And inasmuch as the statute only directs the Railroad and Warehouse Commission to prescribe by order a plan of the interlocking in case the parties are unable to agree, therefore, it is ordered that this petition be further held under consideration by the Commission pending the efforts of petitioner and respondent to agree upon a plan of interlocking.

Adopted June 21, 1892.

No. 14.

PROTECTION OF CROSSING.

THE CHICAGO & ALTON RAILROAD COMPANY,

vs.

THE CHICAGO & WESTERN INDIANA RAILROAD COMPANY,
(THE BELT RAILWAY COMPANY OF CHICAGO, LESSEE), AND
THE ATCHISON, TOPEKA & SANTA FE RAILROAD CO.

Application by the Chicago & Western Indiana Railroad Company, (the Belt Railway Company of Chicago, Lessee), to Modify and Correct Order Touching Division of Original Cost of Device and Expense of Maintenance.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman.*

This is an application by the Chicago & Western Indiana Railroad Company (The Belt Railway Company of Chicago, lessee), to modify the order heretofore entered in the above petition and citation upon the point.

of the division of the original cost of the construction of the device ordered, and of the expense of the maintenance of said device in good order and repair.

In the original opinion entered in this matter it was said:

"There are a switch and a signal which add two levers in the tower, and are located between the tracks of the Alton and the Atchison, upon one of the Western Indiana tracks. These appliances are not essential to the interlocking of the crossing, but are put in, we learn from the Consulting Engineer, at the request of the Western Indiana and Belt Companies for their exclusive accommodation. So far as the other companies are concerned, the crossings could be perfectly interlocked without these appliances. We, therefore, think it not unjust to charge the extra cost of these particular appliances to the Western Indiana and Belt Companies. Without these the number of switches, signals and levers would be exactly equal upon all these lines. Apportioning first cost upon levers, which, under the circumstances, we think would be just, the Chicago & Western Indiana and the Belt Companies would pay four-tenths of the first cost, the Chicago & Alton three-tenths, and the Atchison three-tenths. We think such an apportionment of the first cost of the plant would be fair under the circumstances."

In the order for the interlocking, entered on the same day the opinion was delivered, the following provision was incorporated upon the subject of this present application:

"That it would be just and equitable for the companies named in said petition and citation to pay for the original cost and future maintenance of said device, as follows: The Chicago & Western Indiana Railroad Company (The Belt Railway Company of Chicago, lessee), four-tenths; the Chicago & Alton Railroad Company, three-tenths, and the Atchison, Topeka & Santa Fe Railroad Company, three-tenths."

The present application is made upon the ground that the division of this expense was made by the Commission under a misapprehension of the facts. It is urged that the Commission have made a mistake, and have power to correct it, and should correct it. The ground chiefly urged for this application, is, that the Commission erred in believing and saying that the switch and signal located upon the track of the Western Indiana Company, between the Alton and Atchison tracks, is of benefit only to the Western Indiana and Belt Companies. The representatives of the latter companies admit that said switch and signal were put in at their request, but deny that they were put in for their exclusive benefit. It was not, however, shown upon the hearing that the Chicago & Alton Company is in any way benefitted by this switch and signal. We understand the claim, so far as the Alton Company is concerned, was abandoned, but it was urged upon the hearing that the Atchison Company is benefitted equally with the Western Indiana and Belt Companies.

Upon the further hearing of this case under this application, it becomes apparent that the Atchison Company is, to a small extent, benefitted by these appliances, but the benefit it derives from them is very much less than the benefit derived by the Western Indiana and Belt Companies. It would be very difficult, indeed, to apportion the added cost of this switch and signal between the companies upon the evidence before us. The benefit conferred upon the Atchison Company being so slight compared with the benefits derived by the Western Indiana and Belt Companies, and the appliances having been originally placed where they are upon the request of the latter companies, we are unable to see our way to charge any part of them to the Atchison Company.

It is very apparent, however, that there is an error in this order. Dividing the cost upon the basis laid down by the Commission, there is no possible way in which the division into tenths could have been made except through a blunder, which was in fact committed.

It will be observed the opinion says: "Without these (meaning the switch and signal in question), the number of switches, signals and levers would be exactly equal upon all these lines." This is true. Counting the switches, signals and levers upon each of the three roads concerned, aside from the extra derail and signal in question, the number is thirty, there being ten switches and signals on each line. Therefore, without the extra derail and signal, the order would correctly have been for each company to pay one-third of the cost. But when the extra derail and signal are added, they make the number thirty-two in all; and upon the basis adopted, the cost would resolve itself into thirty-seconds instead of tenths. On that basis, the Chicago & Alton Company should pay ten thirty-seconds, the Atchison Company ten thirty-seconds, and the Western Indiana and Belt Companies twelve thirty-seconds, which would be a less proportion to be paid by the latter. The exact excess charged to the Western Indiana and Belt Companies on this basis, is one-fortieth. Hence, it is no more than just that this mistake should be corrected and the order modified.

The Commission are satisfied, further, upon consideration of the whole matter, that a better way to have arrived at the extra cost to be paid by the Western Indiana and Belt Companies, would have been to tax these companies not with an extra proportionate share of the whole cost, but with the actual cost of the switch and signal in controversy. If these companies pay the actual extra cost of these appliances, it is all that could be justly demanded, and the extra cost, the Commission is informed, would be less than a proportionate share based upon the number of levers, as attempted to be done in the original order.

It is, therefore, directed that the Secretary enter upon the docket the following modified order upon the particular question of the apportionment of the original cost and future maintenance of said device—that is to say:

MODIFIED ORDER.

"Each of the said companies, to-wit, the Chicago & Western Indiana Railroad Company (the Belt Railway Company of Chicago, lessee), the Chicago & Alton Railroad Company, and the Atchison, Topeka & Santa Fe Railroad Company shall pay one-third part of the original cost of construction, and of the expense of maintenance of said entire device, with the exception of the switch and signal located upon the track of the Chicago & Western Indiana Railroad Company, between the tracks of the Chicago & Alton Railroad Company and the Atchison, Topeka & Santa Fe Railroad Company; and as to the original cost and expense of maintenance of the said last mentioned switch and signal so located, it is ordered that such actual cost and expense be paid by the Chicago & Western Indiana Railroad Company (the Belt Railway Company of Chicago, lessee).

"And it is further ordered, that the original order entered in said cause, except as the same is hereby expressly modified, shall stand as originally entered in this proceeding."

No. 15.

FOR PROTECTION OF CROSSING.

 THE BALTIMORE & OHIO & CHICAGO RAILROAD CO.,
Petitioner.

vs.

THE SOUTH CHICAGO CITY RAILWAY CO.,

Respondent.

OPINION OF THE COMMISSION.

 BY PHILLIPS, *Chairman*.

The petition in this case shows that the South Chicago City Railway Company, defendant, "is seeking under and by virtue of an ordinance of the city of Chicago, to lay its car tracks along and upon Commercial avenue, and to cross the tracks of petitioner in said Commercial avenue at the west end of your petitioner's yards, at grade, and without precaution looking to the safety of the public, or to the protection of human life transported by the said street railway company, or petitioner;" also, that said street railway company proposes to operate its line with electrical power, under the system known as the "trolley system," and that it (defendant) "proposes to put in the grade crossing aforesaid, irrespective of the control exercised by your honorable Board in the matter of the place and manner of railroads crossing or intersecting each other; and without regard to the safety of the public."

Accompanying said petition is a plat showing the location of the proposed crossing; and the petition "prays that action may be taken by your honorable Board in the premises, to the end that said crossing may be rendered safe, and as far as possible free from danger to the public."

It is objected by the defendant, among other things, that the petition does not state a case coming within the provisions of the statute of Illinois relating to railroad crossings, and does not ask any relief which comes within the jurisdiction of this Board.

The only power of the Commission to compel the protection of railway crossings must be found in the act entitled "An act to protect persons and property from danger at the crossings and junctions of railroads," etc., approved June 2, 1891. The first section of that act provides:

"That in every case where the main tracks of two or more railroads cross at grade in this State, any company owning or operating any one of such tracks whose managers may desire to unite with others by protecting such crossing with interlocking, or other safety devices, may file with the Railroad and Warehouse Commission a petition stating the facts of the situation, and asking said Railroad and Warehouse Commission to order such crossing to be protected by interlocking signals, devices and switches, or other safety appliances, etc."

Section 3 of the act directs the manner of proceeding to hear cases for the protection of crossings, giving the Commission power to apportion costs and expenses, and concludes as follows:

"In case, however, one railroad company shall hereafter seek to cross at grade with its track or tracks, the track or tracks of another railroad com-

pany, and the Railroad and Warehouse Commission shall determine that interlocking or other safety appliances shall be put in, the railroad company seeking to cross at grade shall be compelled to pay all costs of such appliances, together with the expense of putting them in and the future maintenance thereof."

Do these provisions confer upon the Commission power to order the protection of the crossing described in the petition? In other words, is the South Chicago City Railway a "railroad" within the meaning of the Interlocking Act of 1891? We think not. We are constrained to hold that this Commission has no jurisdiction in the premises. The legislature has provided for the incorporation and regulation of street railways by an act separate and different from that which pertains to the incorporation and regulation of railroads proper. Street railways were evidently not intended to be included in those acts of the legislature which confer jurisdiction upon the Commission to make and enforce schedules of maximum rates, to cause dangerous roads to be repaired and other like powers. Those acts have always been understood to refer to railroads, and not to street railways; and there is nothing to indicate that the legislature intended that the Act of 1891 for the protection of railroad crossings was intended to have a wider scope than the previous Acts.

The fact that another power, electricity, has been substituted, which supplies a higher rate of speed, and makes street cars more dangerous instrumentalities than they were in the days when horse power was exclusively used, has not, we think, made them "railroads" within the meaning of such acts as that now under contemplation.

The petition does not pray for specific relief. It asks that "action may be taken to the end that said crossing may be rendered safe, etc." The only provision looking to the safety at crossings which the Commission has power to enforce is their protection by interlocking signals and derrails, or other like safety appliances. We have sought to avoid building up any technical system of pleading and practice before the Commission in these cases, and might accordingly overlook the very general terms of the prayer of this petition, were the case one over which we deem ourselves to have any power. Holding, as we do, however, that this Board is without jurisdiction in such a case, the petition must be dismissed, and the Secretary will enter an order accordingly.

FINAL ORDER OF THE COMMISSION.

TUESDAY, December 27, 1892.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day, present—Isaac N. Phillips and J. C. Willis, Commissioners, and J. H. Paddock, Secretary—the following proceedings were had in this cause:

And now this petition having come on for final hearing and determination before the Commission this 27th day of December, 1892, and the Commission having considered the evidence taken herein and the arguments of the counsel made before the Commission at a former session, and being fully advised in the premises, doth find that this Commission is without jurisdiction in this case.

It is therefore ordered by the Commission that the said petition be dismissed.

Adopted December 27, 1892.

No. 16.

PROTECTION OF CROSSING AT NORMAL.

 THE CHICAGO & ALTON RAILROAD CO.,
*Petitioner.**vs.*

THE ILLINOIS CENTRAL RAILROAD CO.,

Respondent.

 OPINION OF COMMISSION.

BY PHILLIPS, *Chairman*:

Respondent does not object to an order for the interlocking of the crossing described in this petition. The sole question made is as to the division of the cost. One item, that of the "operation" of the device, is not, however, in controversy, it being agreed that the companies should pay this equally. The question made is, how the first cost of the interlocking device, and the expense of its maintenance shall be paid for.

Mr. Wallace, Chief Engineer of the Illinois Central road, has urged upon us with much force of reason a general basis for the division of expenses in cases of this kind. We fully recognize the desirability of adopting some just rule of determination to be applied to such cases: but we have heretofore hesitated to lay down an inflexible rule, knowing well that experience sometimes spoils theories, and that it is not possible to foresee what new conditions may arise in future cases, not considered in adopting the rule.

Since discussing the different proposed rules of determination in our opinion in the case of the crossing at Paducah Junction, we have continued to give the subject attention. We are now strongly inclined to adopt, in the main, the basis suggested by Mr. Wallace as a rule of determination to be applied to future cases except those which may be very exceptional in their facts and conditions, or in which subsisting contract obligations may change the rule.

That basis is as follows:

First—Each company to pay the original cost of all the apparatus and mechanism used upon its own tracks, including all signals, derails, pipelines, wire-lines, boxing and all connections in its tracks, and also the cost of putting all these in ready for use, and of maintaining the same in good repair.

Second—The cost of the interlocking machine proper and the expense of maintaining the same in good working order to be divided between, or among, the companies in the proportion that the levers used to operate the appliance in the tracks of each company bear to the whole number of levers.

Third—The cost of the tower house wherein the interlocking machine is housed, and the expense of the operation of the machine, (i. e., wages of operators), to be divided upon the basis of the number of roads using the system.

We have varied the proposition of Mr. Wallace to the extent of dividing the cost of the tower on the basis of the number of roads instead of upon the basis of the number of levers. There is little to choose between the two methods, but we deem the division above stated the fairest, as a tower house would be needed in any event, and the cost of such tower would be little, if any, enhanced by a few additional levers. We therefore think cost of tower may be better grouped with expense of operation, than with the cost of the interlocking machine.

We see a possible difficulty to which this plan may lead, which we deem it proper to notice here. Under the second point above, which divides the cost of the interlocking machine in proportion to the levers used to operate the appliances located on the several tracks, a temptation will be offered to reduce the number of levers by making each lever carry too much work. The companies to the present proceeding, being under very enlightened and progressive management, are not likely to fall into an error so at variance with good signaling practice. It is not for them particularly that we add this caution. Any manifestation of the disposition stated in future cases must be corrected by the Consulting Engineer of the Commission.

An order will be entered in this proceeding providing for the interlocking of the crossing described in the petition, and apportioning costs and expenses in the manner hereinabove specified. Our consulting engineer has prepared a plan for the interlocking of this crossing which we submit to the companies as a suggestion of what is deemed to be requisite for the proper protection of the crossing. The companies have a right, under the statute, to agree upon details of plan, if they can. In default of their speedy agreement in this particular, we will enter a further order covering that part of the case.

FINAL ORDER OF THE COMMISSION.

TUESDAY, December 27, 1892.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day—present Isaac N. Phillips and J. C. Willis, Commissioners, and J. H. Paddock, Secretary—the following proceedings were had in this cause:

And now this petition having come on for final hearing and determination before the Commission this 27th day of December, 1892, and the Commission having considered the evidence taken herein, the agreements made by the parties hereto, and the arguments made before the Commission at a former session, and being fully advised in the premises doth find:

That the public good requires that the crossing formed at Normal, Illinois, by the tracks of the Chicago & Alton Railroad Company and the Illinois Central Railroad Company, be protected and operated by an interlocking device or machine, and that the following would be a just and equitable basis on which to apportion the cost of said device or machine:

First—Each company to pay the original cost of all the apparatus and mechanism used upon its own tracks, including all signals, derails, pipelines, wire-lines, boxing and all connections in its tracks, and also the cost of putting all these in ready for use, and of maintaining the same in good repair.

Second—The cost of the interlocking machine proper, and the expense of maintaining the same in good working order to be divided between the two companies in the proportion that the levers used to operate the appliance in the tracks of each company bear to the whole number of levers.

Third—The cost of the tower house wherein the interlocking machine is housed, and the expense of the operation of the machine (i. e., wages of operators) to be borne equally by the petitioner and respondent.

It is therefore ordered by the Commission that the said companies, to-wit: The Chicago & Alton Railroad Company and the Illinois Central Railroad Company forthwith proceed to protect said crossing by a system of interlocking signals and switches, to be agreed upon by the parties, with this Commission's approval, if the parties are able to agree, the cost of construction, the expense of maintenance and the cost of the operation of such interlocking device to be divided upon the following basis:

First—Each company to pay the original cost of all the apparatus and mechanism used upon its own tracks, including all signals, derails, pipelines, wire-lines, boxing and all connections in its tracks, and also the cost of putting all these in ready for use and for maintaining the same in good repair.

Second—The cost of the interlocking machine proper and the expense of maintaining the same in good working order to be divided between the two companies in the proportion that the levers used to operate the appliance in the tracks of each company bear to the whole number of levers.

Third—The cost of the tower house wherein the interlocking machine is housed, and the expense of the operation of the machine (i. e., wages of operators) to be borne equally by the petitioner and the respondent.

It is further ordered that this petition be further held under consideration by the Commission pending the efforts of petitioner and respondent to agree upon a plan of interlocking.

Adopted December 27, 1892.

No. 17.

PROTECTION OF CROSSING AT PEORIA.

THE PEORIA & PEKIN UNION RAILWAY CO.,

Petitioner,

vs.

THE PEORIA TERMINAL RAILWAY CO.,

Respondent.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman*:

The proposed crossing, which this petition prays to have interlocked, is in the city of Peoria, at a point on the track of the Peoria & Pekin Union Railway, 250 feet from the west end of the Illinois river bridge. A crossing at the point in question was originally proposed by the Peoria & Farmington Railway Company, which, at the May term, 1883 of the Peoria County Court, obtained by judgment in condemnation a right to cross at this point the right of way and track of the Peoria & Springfield Railroad Company, to which latter company, petitioner, is the successor in the property by purchase on foreclosure. The track of the Peoria & Springfield Railroad (now the Peoria & Pekin Union) was before that time laid and being used; but the Peoria & Farmington road was but partly constructed after the condemnation, and its track never was laid. Respondent, the Peoria Terminal Railway Company, has suc-

ceeded to the Peoria & Farmington franchise and rights, and is now proceeding to construct the road on the line of condemnation, thus giving rise to the present proceeding.

The questions only are presented here. The first is, does the public good demand the protection of the proposed crossing under the Act of 1891? We do not understand the respondent seriously to contest this proposition. The P. & P. U. track at the point of the proposed crossing is used by three other companies under lease, namely: the L. E. & W., the J. S. E. and the "Big Four." The trains, both passenger and freight, passing the point are numerous. Proceeding westward into the city from the point of crossing, the P. & P. U. ascends a grade, and describes a curve, while on the east, very near, is the draw-bridge of the P. & P. U. across the Illinois river, a navigable stream. In this day, when good practice is fast leading to the protection of all railroad crossings, on grounds of economy as well as safety, we could not long hesitate to hold that this crossing requires protection, even though it is true as contended, that the Peoria Terminal Railway Company will haul but few trains over the crossing.

The remaining question concerns cost and expense. Is this case one wherein the Commission has discretion to apportion first cost of the apparatus, and expense of putting in and maintaining the same between the companies; or is it one in which these items of cost and expense are, by the statute, cast upon respondent, as being a company "seeking to cross" with its track the track of another company?

Sec. 3 of the act of 1891 for the protection of crossings closes with the following provision relative to crossings which might be constructed after the passage of the act:

"In case, however, one railroad company shall hereafter seek to cross at a grade with its track or tracks, the track or tracks of another railroad company, and the Railroad and Warehouse Commission shall determine that interlocking or other safety appliances shall be put in, the railroad company seeking to cross at grade shall be compelled to pay all cost of such appliances, together with the expense of putting them in and the future maintenance thereof."

Here, then, is the question: Does the judgment of the county court in condemnation entitle respondent to cross the track of petitioner without assuming those expenses of interlocking, mentioned in the provision above quoted, and now adjudged by us to be required at this crossing for the public good?

It is important to note that the function of the Commission under the act of 1891 is wholly distinct from the function of the county court in condemnation. The two lines of action do not touch at any point. Condemnation fixes the damages for the use declared: the Commission enforces a police regulation applied to the operation of trains, and designed for the public safety. As regards claims for damages, respondent reads its title clear in the judgment of condemnation. As regards right of way, it has, in legal contemplation, already crossed petitioner's track. As regards the police regulation embraced in the act of 1891, it has not crossed, but is still "seeking to cross." Had no judgment of condemnation been obtained prior to the passage of the act of 1891, we concede that respondent might even now, with that act in full force, proceed to condemn and get judgment, placing itself in precisely the legal attitude it now occupies, leaving the interlocking still unsettled as it now is. In other words, it could, we think, in face of the interlocking act, obtain its right to cross, so far as damages and right of way are concerned, but the question of the protection of the crossing to be made would remain as it remains now. That question would legally arise when respondent should physically "seek to cross with its track." By getting its right of way through condemnation proceedings, respondent did not obtain exemption from the operation of such police regulations as were then in force, or might afterwards be provided by law.

Such is the view we are constrained to take. Much nice reasoning might be indulged, but what has been said is deemed sufficient to express our view, which is, that respondent comes within the provisions of the statute above quoted, which casts upon the road seeking to cross, (1) the first cost of the machine to be used; (2) the expense of putting the machine in; (3) the expense of maintaining the same in good order and repair.

The question whether this statute is broad enough to compel the company seeking to cross to pay also the expense of operating the machine, was a subject of contention before the Commission in the case of Tamaroa & Mt. Vernon Ry. Co. v. The Louisville & Nashville R. R. Co., which was decided by us June 21, 1892. We refer to the opinion in that case for the construction of the statute in this particular. We arrived then at a conclusion which we see no reason to change, namely: That the expense of "operating" the machine was, by the statute left to be apportioned by the Commission in its discretion. In that case we divided such expense equally, and we think the same should be done here.

An order will be entered in this case in accordance with the views here expressed, which order will embrace the interlocking of the crossing and the fixing of the costs and expenses to be paid as herein indicated. But the companies still have a right, under the statute, to agree upon the plan of the interlocking if they can do so, subject to the approval of the Commission. The order therefore entered will not embrace specifically the details of the device to be put in, that question being left for the parties to agree upon, if they can. In that connection we suggest that the Consulting Engineer of the Commission, who is an expert in such matters, and has given the subject of interlocking very large attention, be consulted by the parties.

TUESDAY, December 27, 1892.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, on this day—present Isaac N. Phillips and J. C. Willis, Commissioners, and J. H. Paddock, Secretary—the following proceedings were had in this cause:

And now this petition having come on for final hearing and determination before the Commission this 27th day of December, 1892, and the Commission having considered the evidence taken herein and the arguments of the counsel made before the Commission at a former session, and being fully advised in the premises, on consideration doth find:

That the public good requires that the crossing to be formed at Peoria, Illinois, by the tracks of the Peoria & Pekin Union Railway Company and the tracks of the Peoria Terminal Railway Company be protected and operated by an interlocking device or machine, to be agreed upon by the parties, with this Commission's approval, if the parties are able to agree; that the first cost of the machine, the expense of putting the machine in, and the expense of maintaining the same in good order and repair should be paid for by the respondent, the Peoria Terminal Railway Company, as provided by statute; and that it would be just and equitable for each of the companies named in the petition to pay one-half of the expense of the operation of such interlocking device or machine.

It is therefore ordered by the Commission that the crossing to be formed at Peoria, Illinois, by the tracks of the Peoria & Pekin Union Railway Company and the Peoria Terminal Railway Company be protected and operated by an interlocking device, and that the respondent, the Peoria Terminal Railway Company, pay the first cost of the machine, the expense of putting the machine in, and the expense of maintaining the same in good order and repair. It is further ordered by the Commission that of the cost of the operation of such interlocking device the said Peoria & Pekin Union Railway Company petitioner, shall pay one-half, and the said Peoria Terminal Railway Company, respondent, shall pay one-half.

It is further ordered that this petition be further held under consideration by the Commission pending the efforts of the petitioner and respondent to agree upon a plan of interlocking.

Adopted December 27, 1892.

No. 18.

PASSENGER TRAIN SERVICE.

CITIZENS OF SHAWNEETOWN,

Complainants,

vs.

LOUISVILLE & NASHVILLE R. R. CO.,

Respondent.

OPINION OF COMMISSION.

SPRINGFIELD, January 3, 1893.

Hon. W. R. McKernon, State's Attorney, Shawneetown, Ill.:

DEAR SIR—Answering your letter of recent date to Mr. Paddock, Secretary of the Railroad and Warehouse Commission, wherein you inquire what decision the Commissioners have come to upon the complaint of the Citizens of Shawneetown against the Louisville & Nashville Railroad Company, I have to say that the Commissioners have as yet rendered no decision or opinion in the case. Although convinced that the passenger service between McLeansboro and Shawneetown is not such as is desirable, it seems to be very questionable whether the law affords any remedy for the unpleasant state of affairs which exists. I will here briefly state the difficulties which the Commissioners have encountered in their attempt to find a way to afford legal relief to the citizens of Shawneetown.

The complaint of the citizens of Benton, Franklin county, against the "Cairo Short Line" embodied, substantially, the same state of facts presented in the complaint of the citizens of Shawneetown. The Commissioners being in doubt in the Benton case, and having in view the fact that the Attorney General is made, by statute, their legal adviser, referred the whole question of their power to compel additional train service to the Attorney General. His elaborate opinion upon this question, and his view of the law applicable to the facts presented in the Benton petition, will be found printed in our report of 1889, p. 196.

The conclusion of the Attorney General was that the Railway Commissioners of Illinois are without power to enforce relief upon the state of facts presented by the citizens of Benton, which facts, we have before said, are practically identical with those presented in your petition.

It appeared in the Benton case, from statements made by the Auditor of the company, that the line running through Benton was being operated at a loss. The same fact appears with reference to the line between Shawneetown and McLeansboro, from the statement produced by Superintendent Dickson, and sworn to by him as a correct summary of what appears from the books of the Auditor. In the Benton case, it appeared that the line operated under the name of the "Cairo Short Line," as a whole, earned money over and above expenses. Attorney General Hunt,

in his opinion, discussing the question whether the surplus revenues from other lines furnished a legal basis for compelling the company to operate additional trains on the Eldorado Division, which was losing money upon the train already in use, says:

"I have given this matter much consideration, have found no case which sustains that position, and have serious doubts whether such liability can be enforced. The sworn report of the auditor of the company, submitted with the company's answer, and not controverted, shows that in the five years—1884 to 1888, inclusive—the total loss in operating the Belleville & Eldorado Line was \$44,810.64. With this exhibit, and on the statement of facts on which the complaint in this case is based, I do not believe that a court would, in a proceeding in the nature of *quo warranto*, hold the company liable or forfeit its franchise for refusing to increase its losses in operating the line."

The opinion of the Attorney General on this point is strongly supported by the case of the *Fitchburg R. R. Co. v. Commonwealth*, 12 Gray 180, and was doubtless examined by him upon this point, though it is not cited in his opinion.

We note what you say about the unfairness of considering the line from McLeansboro to Shawneetown as merely a branch, and not as part and parcel of the entire line known as the Southeast & St. Louis, and also your criticism of the manner in which the statement of the company is made up, and we might incline to take your view of these matters—at least so far as to order an expert examination of the books of the company for the purpose of getting a corrected statement of earnings and expenses—were it not for the fact that there seems to be an insuperable legal obstacle in the way of an action in this case, independently of the question whether the line makes or loses money. That obstacle is found in the very imperfect state of the remedial law upon the subject of compelling train service by a general writ in the name of the people. In our report for the year 1889, page 16, you will find the views of the Railroad Commissioners of this State fully expressed on this subject. In that report we urged the necessity of further legislation to meet such cases as that embraced in the petition of the citizens of Shawneetown.

The Attorney General, in his opinion upon the Benton case, to which reference has been made, held that a writ of *mandamus* would not lie to compel additional train service upon a railroad. His opinion was professedly based upon the case of *O. & M. Ry. Co. v. The People*, 120 Ill. page 200. The learned Justice delivering the opinion in that case, used the following language:

"It is believed no case can be found, which, in the absence of a statutory requirement, has gone to the length of holding that a railway company may be compelled by *mandamus* to increase the number of trains on its road, or to run daily a particular number of trains over its road; and we are satisfied there is no common law authority for making such an order."

If this be sound law (and it certainly is the law in Illinois until reversed), then it would seem that there is no means by which the Commissioners could act in the direction of affording the relief prayed. To proceed to forfeit the franchise of the road by a writ of *quo warranto*, might entirely cut off the train service of Shawneetown, and it is not perceived how such an action could possibly make the train service better. Orders of the Railway Commissioners, you are, of course, aware, have no binding force as judgments, but remain to be enforced through the process of the courts. Should we make an order in this case which the courts afford no remedy to enforce, the act would be merely nugatory, and would afford your people no relief.

For the reasons given, the Commissioners have not judged it prudent to make any order in the premises, and I am authorized to say that the views here expressed meet the approval of the Commissioners, and may be regarded as our opinion upon the case as made.

One practice of the company, shown by the evidence, is in direct violation of the statute. It was shown that the company is accustomed to haul freight cars in its trains behind passenger coaches. Against this practice the statute denounces a penalty, which the company incurs whenever it hauls its freight cars in this manner.

It was also shown that the company is accustomed to distribute cars upon its main track, between stations, to be loaded, and that, on the return, the custom is to push such freight cars ahead of the locomotive until a siding is arrived at where they can be transferred to the rear. True, it appears that by this practice the company accommodates many of its patrons, particularly those who ship blocks and logs, thus saving them the trouble and expense of transporting their freight to distant side tracks, which, it is said, would render the business unprofitable. The Commissioners cannot, however, take note of these little conveniences which result from violations of the statute. Our duty is to enforce the law as we find it. You are therefore authorized by the Commissioners, as State's Attorney of Gallatin county, and as one of the legal advisers of the Commission, made so by statute, to proceed to prosecute violations of the statute in the particulars last noted. You are upon the ground, and the facts are accessible to you. You will please advise us, however, of such prosecutions as you may institute for these violations of the statute.

Regretting that we cannot afford relief of a more comprehensive character to your people, I remain, sir,

Very truly yours,

ISAAC N. PHILLIPS,
Chairman R. R. and W. Commission.

Adopted January 3, 1893.

No. 19.

FOR LEAVE TO CROSS NEAR KINDER.

THE MADISON, ILLINOIS & ST. LOUIS RAILWAY CO.,
Petitioner.

vs.

THE WABASH RAILROAD CO., THE CLEVELAND, CINCINNATI,
CHICAGO & ST. LOUIS RAILWAY CO., THE CHICAGO &
ALTON RAILROAD CO.,

Responden'ts.

OPINION OF THE COMMISSION.

OPINION BY PHILLIPS, *Chairman:*

Petitioner seeks to cross with its tracks, the tracks of the Wabash, the "Big Four," and the Chicago & Alton Railroads, near Kinder, Madison county, Illinois. The respondent companies are all objecting to the proposed crossing. Hence this petition for an order of the commission granting leave to cross.

The crossing is objected to, among other things, upon the ground that there is no public necessity for the building of petitioner's road across the tracks of respondents at the point proposed; that from all that appears the road will terminate on a prairie where there are no inhabitants; that the industries and factories which petitioner alleges it is seeking to reach upon the west are merely projected, and no one knows whether they will ever be built.

It is further objected that the only object of petitioner in forcing this crossing is to connect with what is known as the "Bluff Line" just beyond the point of crossing.

It is further contended that in case petitioner is permitted to cross at all, an overhead crossing should be ordered in order to avoid the danger and delay to travel and transportation which the statute directs shall not be "unnecessarily" interfered with.

Finally it is said, in case petitioner is permitted to cross at grade as prayed, it should bear all the expense of protecting the crossing, including the expense of operating the interlocker.

Upon these several points of objection we observe:

1. That the Railroad Commissioners of Illinois are not made by law judges of the necessity for building railroads. The General Assembly, in the act for the incorporation of railroads, has fixed all the conditions and limitations which exist on this subject. Neither this tribunal or any other has been designated by law to judge of the traffic necessity of new lines. Some states, we believe, have put restrictions upon the building of railroads; but ours has not, charters are taken out fixing the termini of the line to be built; and considerable latitude is allowed to the constructing company in locating its line between these points. Existing lines have in some cases been almost paralleled by useless and speculative lines of road; but there has been and is no legal authority, so far as we know, to prevent this, however much good business judgment may be violated.

2. The same may be said of the objection that the sole object of petitioner is to meet the "Bluff Line," and give that company traffic arrangements for crossing the tracks of respondents. If this objection were sustained it would go to the right of petitioner to build the road, and not merely to the particular place where it is seeking to locate its line. We are not aware that a connection with the "Bluff Line" is an illegal object, or that the Commissioners of Railroads have any power to examine into the motives of petitioner and to deny its petition upon the ground that its object is not deemed to be justifiable. The Commissioners are simply directed by the statute, after hearing, to "prescribe the place where and the manner in which such crossing shall be made." If the company has complied with the necessary statutory provisions to enable it to build a railroad, we, as Railroad Commissioners, are not authorized to deny that a crossing of some kind may be made of the tracks across which it projects its line. In other words, we are to "prescribe" a crossing, not deny one altogether.

We have said no power exists to prevent petitioner from proceeding with the construction of its line upon the ground that it meets no public necessity, and that the objects and motives of its projectors are not proper. It is sufficient, perhaps, to say that this Commission can assume no such power under the statute. Petitioner, before proceeding to cross the right of way of respondents with its road, must, in addition to getting leave of the Commission, proceed to condemn its right of way in the County court. If any power exists in that court to check the building of this line upon the grounds urged, respondents can there interpose their objections, and that tribunal will judge of its own jurisdiction and powers.

3. The objection based upon the danger to travel and transportation upon respondents' lines, which will result from the proposed crossing, raises the question whether, with such crossing, well protected by interlocking, will entail an "unnecessary" danger and delay within the meaning of the statute. It is the judgment of the Commissioners that every

crossing, however well protected by interlocking, introduces some elements of danger and of delay to travel and transportation. The language of the statute is that future crossings shall be constructed "at such place and in such manner as will not *unnecessarily* impede or endanger the travel or transportation upon the railway so crossed."

We once had occasion to observe, in the case of the *Chicago, Madison & Northern R. R. Co. vs. The Belt Railway Company* of Chicago, that the word "unnecessary" is not used in this statute in its strict philosophical sense. In that sense, only that is "necessary" which cannot possibly be avoided, and there would always be a possibility of changing the place and manner of a crossing in order to avoid even the slightest danger or delay. The General Assembly evidently expected that some crossings would still be made at grade. Grade crossings were not positively prohibited, but a means was provided by which, when the configuration of the ground proved favorable, crossings might be ordered to be constructed over or under. It was doubtless intended that reasonable regard should be had to the circumstances of each case. The question here, therefore, is not whether there will be some danger and some delay, but will this crossing "unnecessarily" impede or endanger travel or transportation within the sense intended by the General Assembly? Recognizing fully the desirability of separating crossing tracks where that is feasible, we do not think a fair application of this statute justifies us in ordering an overhead crossing in the present case. We have caused an estimate to be made of the expense of such a crossing, which is about \$77,000. Such a burden the railway companies of this state have only in rare instances voluntarily imposed upon themselves in the past for the sake of avoiding danger and delay, even though, when their lines were built, no such safety appliances were used or existed as those which may now be put in at this crossing.

Putting expense aside, however, as not to be weighed against danger to life and property, a further difficulty still exists. Petitioner states one of its objects to be to connect its line with the three respondent railways, particularly the "Big Four," which is the middle track of the three, they all lying parallel and near together at the point designated, the Wabash being upon the east, the "Big Four" in the middle and the Alton upon the west. The act for the incorporation of railway companies provides that every corporation formed under the act shall have power:

"To cross, intersect, join and unite its railways with any other railway before constructed, at any point in its route, and upon the grounds of such other railway company, with the necessary turnouts, sidings and switches, and other conveniences in furtherance of the objects of its connection; and every corporation whose railway is, or shall be hereafter, intersected by any new railway shall unite with the corporation owning such new railway in forming such intersection and connection, and grant the facilities aforesaid; and if the two corporations cannot agree upon the amount of compensation to be made therefor, or the points and manner of such crossings and connection, the same shall be ascertained and determined in manner prescribed by law."—2 Starr & Curtis, page 1914, Par. 6.

In order to "intersect, join and unite" its tracks with the tracks of respondents, as it seems petitioner has a right to do under the above provision, petitioner would be compelled to build an additional track upon a level with the tracks crossed. But the same difficulty we now have would then again present itself; for petitioner could not connect with the "Big Four" from the east without crossing the Wabash; and it could not connect with the Alton without crossing both the Wabash and the "Big Four." Thus if petitioner were to insist upon the right to connect with these roads, we should have practically a grade crossing at last; and although such a crossing, made for the purpose of delivering and receiving cars, would perhaps be less used than a regular grade crossing, it would nevertheless, in the judgment of the Commission, be such a crossing as would require protection by interlocking. Thus we see an order for an overhead crossing would probably tend very little to simplify the situation.

We have therefore determined that we cannot deny the prayer of the petition. While interlocking machines do not entirely avoid danger and delay at crossings, they do have the effect of reducing these to a minimum. With such an equipment we are not able to say in the language of the statute that a grade crossing here would "unnecessarily impede and endanger travel and transportation."

The question of the division of the expense of operating an interlocker remains to be considered. Petitioner concedes that the statute casts upon it the burden of paying the first cost of the interlocking appliance, of putting the same in ready for use, and maintaining the same in good repair. Respondents claim that to do this should be added the burden of also operating the machine. Upon this question the Commissioners have fully expressed their views in the opinion in the case of *The Tamaroa & Mt. Vernon Ry. Co. v. The Louisville & Nashville R. R. Co.*, decided June 21, 1892. We have seen no reason to change the views we there expressed. Under the construction given to the statute in that case the expense of operation of this interlocker, i. e., wages of operators, would be paid for upon the basis of the number of roads using the machine, each paying equally.

In accordance with the views here expressed an order will be entered granting petitioner the right to cross at grade at the point designated in the petition. The order will provide that the crossing shall be protected by an interlocker of improved modern pattern, upon the construction and details of which the companies will be left to agree if they are able to do so. The order will provide that the first cost of such interlocker, the expense of putting the same in, and the expense of maintaining the same in good order and repair shall be paid entire by the petitioner; and that the cost of operating the said machine shall be paid by petitioner and the three respondents equally, one-fourth each.

ORDER.

It is ordered and decided that petitioner, the Madison, Illinois & St. Louis Railway Co., have leave to cross with its tracks, at grade, the tracks of the respondents, the Wabash Railroad Co., the Cleveland, Cincinnati, Chicago & St. Louis Railway Co., and the Chicago & Alton Railroad Co., at the place and in the manner specified in the petition on file in this cause, right of way for such crossing being first obtained under the laws of Illinois relating to Eminent Domain.

It is ordered further, that the crossing of tracks to be thus formed be protected by a system of interlocking signals and switches to be agreed upon by the parties, with this Commission's approval, if the parties are able to agree, the first cost of such interlocking machine, the expense of putting the same in, and the expense of maintaining the same in good order and repair to be paid for by the Madison, Illinois & St. Louis Railway Co. as provided by statute; but it is hereby ordered and decided by the Commission that of the cost of the operation of such interlocking device, the said Madison, Illinois & St. Louis Railway Co., petitioner, shall pay one-fourth, and the said Wabash Railroad Co., Cleveland, Cincinnati, Chicago & St. Louis Railway Co., and Chicago & Alton Railroad Co., respondents, shall pay one-fourth each. And inasmuch as the statute only directs the Railroad and Warehouse Commission to prescribe by order a plan of the interlocking in case the parties are unable to agree; therefore, it is ordered that this petition be further held under consideration by the Commission pending the efforts of petitioner and respondents to agree upon a plan of interlocking.

Adopted January 3, 1893.

No. 20.

FOR PROTECTION OF CROSSING AT WATSEKA.

THE CHICAGO & EASTERN ILLINOIS RAILROAD CO.,

*Petitioner.**vs.*

TOLEDO, PEORIA & WESTERN RAILWAY CO.,

Respondent.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman*:

The grade crossing at Watseka, Ill., which the petition prays may be protected by an interlocker, is not more dangerous, perhaps, than many other such crossings in this State. We cannot, however, agree with the allegation in respondents answer, "that said crossing is safe to life and property, and does not require the protection prayed for in the petition." We do not believe any grade crossing of main tracks can be perfectly safe to life and property. We think all such crossings should be protected as rapidly as due regard to revenues, and to all other kindred precautions looking to the public safety will permit. Everything cannot be done at once, however; and it was not the intention of the law makers, in passing the act of 1891 to compel all crossings to be forthwith interlocked. Had this been their object they would have so provided.

The counsel of petitioner stated upon the hearing that the petitioning company would be willing, rather than that the protection of this crossing should entirely fail, to pay two-thirds of the cost of the construction of the device. The disparity in the volume and importance of the traffic on these roads, while not admitted to be a controlling consideration, in such cases, is deemed a sufficient reason on which to take petitioner at its own offer. The respondent road is a property which, under its present excellent and efficient management, is constantly improving, and rapidly retrieving the misfortunes of the company's earlier period. We think under all the circumstances the petitioner can well afford to pay two-thirds of the cost of an interlocker at this crossing. The expense of the maintenance and operation of the machine will, however, be equally divided between the two companies.

The Secretary will enter an order directing that the crossing described in the petition be interlocked, and providing that of the first cost of the device and of putting the same in ready for use petitioner pay two-thirds and respondent one-third, and that of the cost of maintaining such device in good order and repair, and of operating the same, each of the companies pay one-half. The order will provide that the case be further held while petitioner and respondent agree upon the details of an interlocking device, as provided by statute, if they are able to do so.

FINAL ORDER OF COMMISSION.

CHICAGO, January 4, 1893.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held in Chicago, Illinois, on this day, present—Isaac N. Phillips and J. C. Willis, Commissioners, and J. H. Paddock, Secretary—the following proceedings were had in this cause:

And now this petition having come on for final hearing and determination before the Commission this 4th day of January, 1893, and the Commission having considered the evidence taken herein, and the arguments made before the Commission at a former session, and being fully advised in the premises, doth find:

That the public good requires that the crossing formed at Watseka, Illinois, by the tracks of the Chicago & Eastern Illinois Railroad Company and the Toledo, Peoria & Western Railway Company, be protected and operated by an interlocking device or machine, and that the following would be a just and equiable basis on which to apportion the cost of such device or machine, to-wit: That the said petitioner, the Chicago & Eastern Illinois Railroad Company, pay two-thirds, and the said respondent, the Toledo, Peoria & Western Railway Company, pay one-third of the first cost and of putting the same in ready for use, and of the cost of maintaining such device in good order and repair and of operating the same, the said petitioner, the Chicago & Eastern Illinois Railroad Company, pay one-half, and the said respondent, the Toledo, Peoria & Western Railway Company pay one-half.

It is therefore ordered by the Commission that said crossing be protected by a system of interlocking and signals, to be agreed upon by the companies, with this Commission's approval, if the companies are able to agree, and that said companies shall bear the proportion of the first cost of putting in the device and of maintaining and operating the same as above set forth.

And it is further ordered that this petition be further held under consideration by the Commission, pending the efforts of petitioner and respondent to agree upon a plan of interlocking.

Adopted January 4, 1893.

No. 21.

CORRESPONDENCE

CONCERNING SCHEDULES AND RATES OF THE L. E. & W.
R. R. CO., AND REFERRING TO CERTAIN PROSE-
CUTIONS FOR DISCRIMINATIONS.

LETTER OF ISAAC N. PHILLIPS TO GEORGE L. BRADBURY.

BLOOMINGTON, ILL., May 13, 1892.

George L. Bradbury, Esq., General Manager L. E. & W. R. R., Indianapolis, Ind.:

DEAR SIR:—I am advised that copies of a jobber's special tariff have been sent by the freight department of your company to the wholesale men of Bloomington, superseding the tariff formerly in force on your road. I have just applied to your station office for a copy of this new tariff, but none was furnished me. I understand the effect of this tariff is to considerably raise rates to Bloomington jobbers, bringing them up, so it is said, to the maximum schedule adopted by the Railroad and Warehouse Commission.

I was informed some days ago that some member or members of your freight department had been in Bloomington, and had taken occasion while here to intimate to the jobbers of this city, that unless a certain suit now pending for discrimination here should be withdrawn, your company would raise the rates to the limit allowed by the Commissioners' tariff, and thereby place Bloomington jobbers in a considerably worse position than they were before.

It is not my province, or desire, as a member of the Railway and Warehouse Commission, to ascribe motives to a move of this kind; but before a measure is taken with a view to punishing Bloomington jobbers because the Railway Commissioners have thought fit to enforce the statute against discrimination. I think it not improper to call your attention briefly to the provisions of the law regulating railroads in this State, and to the practice of the Railroad Commission under the same.

Section 8 of the act concerning extortion and unjust discrimination, in force July 1, 1873, provides (and the same phraseology is preserved in later amendments of the act), that

"The Railroad and Warehouse Commissioners are hereby directed to make for each of the railroad corporations doing business in this State, as soon as practicable, a schedule of reasonable maximum rates of charges for the transportation of passengers and freights and cars on each of said railroads," etc.

The method pursued by the Commission for a long time was to make a schedule for each road doing business in the State; but, under the further provision of the statute, which allowed the Commission to classify the roads, various classifications were made, until finally the Illinois roads were all placed in two large classes, as at present, known as Class "A" and Class "B."

It has never been the object of the Commission to press maximums down to so low a point as to leave the roads no room to adjust their rates to the exigencies of their business. It has been recognized that competition must sometimes be met, and so long as in meeting it the railroad violated no law against discrimination, its right to protect itself was not interfered with. The harmony which has generally come to prevail between the Railway Commission and the roads of Illinois, and between the roads and the shippers of the State, has, I assure you, been quite agreeable to the Commission.

It is, however, apparent that should the roads conclude to treat this schedule of *maximum* rates as one to be put in force by them in all cases, not treating it as a maximum only, a very serious revision of the schedule would at once become necessary.

It has been a practice with the freight officers of many railroads (and I may add, a very unjustifiable practice), whenever shippers complain of treatment they deem to be unjust, to show to them the Railroad Commissioners' schedule, and to point out to them how much worse they might fare should the railroads see fit to put that schedule in force.

Since I began this letter, a gentleman of this city has shown me a letter of one of your agents, in which your agent says, in response to a complaint concerning what was deemed an extortionate charge:

"Referring to correspondence, and expense bills attached, I don't see how there is any remedy for this. Stations in Illinois take Illinois State rates, and it is governed by Illinois classification, and it seems to be a very high rate. Take goods from Cincinnati. I expect they will come nearly as cheap as from Bloomington, as that business is governed by the official classification, and it being an inter-state affair, brings it down to a comparatively small rate."

I leave you to judge how long the Railway Board of Illinois is likely to leave in force a maximum rate which your own officers and agents see fit to point to as exorbitantly high, seeking to place the responsibility upon the Railway Commission. You will have only yourselves to blame if the maximum rates fixed by the Commission for your company shall cease to serve as bu aboos to scare the patrons of your company into acquiescence in whatever practices you may see fit to adopt.

Though I have not examined your tariff I judge from accounts received of it that it seriously raises the rates to Bloomington shippers above what had long been in force, fixed voluntarily by your freight department. If this proves to be the case it will become necessary for the Railway Commission to at once make a special schedule of maximum rates for your company as contemplated by the section of the statute above quoted. If our maximums are to be taken as actual working rates, then you can easily see that the Commission must be guided by different principles in adjusting the schedule, from those which were permitted to have force in adjusting what was meant only for a maximum schedule.

This matter will be considered at an early meeting of the Railway Board, of which I will direct the secretary to give you notice, so you may be present and be heard if you see fit to do so.

Very truly yours,

ISAAC N. PHILLIPS,

Chairman R. R. and W. Commission.

(Signed)

LETTER OF SINGER & WHEELER TO W. W. MARMON.

PEORIA, ILL., May 13, 1892.

W. W. Marmen, Esq., Bloomington, Illinois:

DEAR SIR:—We have been in correspondence with H. C. Parker, traffic manager of the Lake Erie & Western Railroad. As you have no doubt noticed, the road has raised the rates about 50 per cent on the strength of the Bloomington people suing the road under the Illinois law, as we understand it, on account of a mistaken idea that the Lake Erie & Western road was giving special rates not enjoyed by your people. About three years ago, you will recollect, what high rates there were in this State, and our jobbers undertook the task and went before the Railroad and Warehouse Commission five or six times and finally compelled the Illinois railroads to reduce their tariff to the same basis as the inter-state tariff was. Indianapolis and Chicago could ship goods into Bloomington cheaper than Peoria could, and the same arrangements will be in force now, since they have raised the rate. The writer cannot see why your jobbers should have brought suit against the two roads running to Bloomington without first positively ascertaining whether there was any special tariff elsewhere or not. We do not think that Bloomington has gained anything by this action. It has simply made their own rate higher as well as ours, but probably with the temper of the management of the Lake Erie and the "Big 4" on this subject, nothing can now be done in the matter. I feel that it certainly was a short-sighted policy of the business men of Bloomington.

Yours truly,
SINGER & WHEELER,
(P. J. Singer.)

LETTER OF ISAAC N. PHILLIPS TO SINGER & WHEELER.

BLOOMINGTON, ILL., May 14, 1892.

Messrs. Singer & Wheeler, Peoria Illinois:

GENTLEMEN:—Mr. W. W. Marmon, of this city, has shown me a letter written by your firm to him, of date May 13th, wherein you say, "We have been in correspondence with H. C. Parker, traffic manager of the L. E. & W. R. R." You further say, "You have no doubt noticed the road has raised the rates about 50 per cent, on the strength of the Bloomington people suing the road under the Illinois law, on account of a *mi taken idea* that the L. E. & W. road was giving special rates not enjoyed by your people."

You further, in your letter, speak of the "short-sighted policy of the business men of Bloomington," in bringing this calamity upon themselves, and say that "with the temper of the management of the L. E. & W. and the 'Big 4' on this subject, nothing can now be done in the matter."

My attention, as a member of the Railroad and Warehouse Commission, had previously been called to the fact that the rates had been raised by the L. E. & W. Company, and I had little doubt it was, as you say, a matter of "temper" with them, and done as a retaliation on account of the action, not of the "business men of Bloomington," but of the Railroad and Warehouse Commission. I infer that it is a matter of "temper" on their part, for the reason that if the notion that they were discriminating were a "mistaken idea," as you seem to imply, they could, of course, have defeated the suit upon the merits. Hence, I infer that it

was because it was not a "mistaken idea" that they have resorted to this questionable practice for the purpose of gaining an advantage in the suit to which you refer.

My purpose in writing you is, as chairman of the Railroad and Warehouse Commission, to ask you to preserve this "correspondence with H. C. Parker," to which you refer in your letter. Your people will be interested, along with the people of Bloomington, in seeing that this railroad company does not arbitrarily and oppressively increase rates, whatever their motives may be in the premises. The correspondence to which you have referred is likely to be needed by the Railroad and Warehouse Commission, in certain investigation likely to occur in the near future. Therefore, I desire, in behalf of the Railway Board, to request you to preserve it and be ready to produce it when it is needed.

Yours very truly,

ISAAC N. PHILLIPS,

Chairman Railroad and Warehouse Commission.

GEORGE L. BRADBURY TO ISAAC N. PHILLIPS.

INDIANAPOLIS, IND., May 16, 1892.

Mr. Isaac N. Phillips, Chairman Railroad and Warehouse Commission, Bloomington, Ill.:

MY DEAR SIR:—I have your favor of the 13th inst. I have been in charge of railroad properties extending into Illinois since the first Commission was appointed, and cannot recall a single instance wherein I have failed to accord to each Commission full respect to them and their rulings, and I fully hope to be able to continue doing so. Of course, I am not advised why your Commission should institute suit against this company without first making complaint to us, or advising us of some wrong doing, thus enabling us to desist and make restitution, if proper. Yet I presume your reasons were good. I desire to say no representative of this company had any authority to intimate to the jobbers of Bloomington any retaliation as referred to, and I think a wrong construction must have been placed on his words.

I am advised by our traffic department that no complaints of our tariffs from Bloomington have come to his knowledge. On the contrary, this company has been favored by the jobbers of Bloomington giving us preference in their business on account of our favorable tariffs, so that we are at a loss to understand why the case or suit has been brought against us. Our desire is to make such just and reasonable tariffs as will enable all the cities on our line to reach out to the fullest extent in business, as against other cities located on other lines, either State or Inter-State; as, for instance, we desire to have Peoria and Bloomington compete in our territory with Chicago and LaFayette and St. Louis, so far as we can without violating the spirit of your laws or doing any one an injustice; and this we were doing, or endeavoring to do, and still desire to do. We had no intention whatever to violate your laws or do violence to the people of Bloomington, and we still have none, and this was the reason our traffic manager visited them, that he might ascertain wherein the trouble existed. I assume your Commission will not press any suit against us, unless you find intentional wrong doing, with refusal on our part to correct.

If you will indicate a time when it will be convenient for yourself or the full Commission to meet with us, I will be glad to conform to it, and I doubt not all questions can be harmonized.

Very truly,

GEO. L. BRADBURY,
General Manager.

ISAAC N. PHILLIPS TO GEO. L. BRADBURY.

BLOOMINGTON, ILL., May 19, 1892.

Mr. George L. Bradbury, Gen. Man. L. E. & W. R. R. Co., Indianapolis, Ind.:

DEAR SIR:—I have your letter of 16th inst., and have endeavored to note and digest its contents.

Among other things, you say you are not advised why the Commission should institute suit against your company without formal complaint. It is true that no formal complaint in writing was lodged with the Commission against your company for discrimination. Shippers often apprehend they may be greatly annoyed if they incur the enmity of railroad managements, and while they may be very profuse in secret complaints to officials, do not wish to go upon record for fear their business may be injured or destroyed by the action of carriers. I can assure you there has been no dearth of complaints that your company has long been discriminating against Bloomington, in territory which naturally belongs to Bloomington jobbers.

In this connection, please note that the Railroad and Warehouse Commission does not sit as a court to try questions of discrimination. The only function of the Commission in such cases is that of a public prosecutor, and I am not aware there is any obligation, moral or legal, to carry the evidence obtained to the offending company and exhibit it before bringing suit. It is true, when a formal complaint is lodged, notice is sometimes given to the company, and even a hearing had, with a view to determining whether there is sufficient grounds for a prosecution. But when the Commissioners receive from any source such information as satisfies them the law has been violated, their duty is very plain under the statute. They are expressly commanded to prosecute in all such cases.

It seems pertinent to observe here, that if the Commission has instituted a prosecution under a misapprehension of the facts, or upon insufficient evidence, there is no surer way or better place to make the fact apparent than in the defense and at the trial. Retaliatory measures would certainly be unnecessary where there is a legitimate defense.

You further say that no representative of your company had any authority to intimate to the jobbers of Bloomington any retaliation, etc. What authority your agents have, I, of course, do not know. The fact is very well established that the intimation was conveyed. It seems useless, however, in the light of developments, to discuss the question whether retaliation was merely *threatened* or not. The actual retaliation itself, which has now come in the form of your special tariff, is a better evidence of the fact than any mere threats: and this, by the way, may serve to illustrate why the suit in question was brought without any formal complaint having been filed by shippers before the Railroad Commission. Where there is such liability to punishment, it does not seem wonderful that shippers should be timid, and expect others to take the responsibility for prosecutions.

I call your attention to the fact that my former letter discussed entirely the matter of your special tariff, in which I am advised you raise rates to Bloomington jobbers to the extent of simply putting in force as your tariff the Commissioners' schedule of maximum rates. Upon this subject, to my surprise, your letter is silent; and I have not yet been able to obtain a copy of the tariff in question, though, as I stated before, I applied to your office here for it, and was told it would be sent to me.

I now refer you to my former letter, as embodying my views on the subject of this special tariff and the action which its enforcement seems to make necessary; and I have to say further, that, while that tariff remains in force, there will, in my judgment, be no occasion for the meeting you suggest with a view to "harmonizing" interests. I am in favor of peace, harmony, and good will all around, and have no wish for a contest, unless one is necessary. But, so far as I am personally concerned, I am not in the habit of acting under the influence of coercive measures, and shall not do so in this case.

Very truly yours,

(Signed)

ISAAC N. PHILLIPS,
Chairman R. R. and W. Commission.

GEORGE L. BRADBURY TO ISAAC N. PHILLIPS.

INDIANAPOLIS, IND., May 20, 1892.

Mr. Isaac N. Phillips, Chairman R. R. & W. Commission, Bloomington, Ill.:

MY DEAR SIR:—I have your favor of 19th inst. It is true, as you say, there is no obligation on the part of your Commission to give us notice of complaint, or a hearing, to determine whether there is sufficient ground for prosecution, but I have always understood your Commission generally adopted such measures, and it was the exception when you instituted suit before giving the parties complained of an opportunity to correct the wrong doing, especially if the parties were innocent in intent. I have said to you, our purpose was to comply with your rulings and we had not knowingly, and do not desire to discriminate against Bloomington jobbers. It is true, the courts can determine whether we have violated the laws or not, in the suit you have brought, but if, as I assume to be the case, your purpose is to correct the wrong doing and afford quick relief, I submit, we being innocent offenders, if at all, would it not accomplish the purpose of your Commission to give us a hearing and an opportunity without reverting to the courts? It is true, we have put in force the Commissioners' schedule of rates, which is an increase over our former tariff, but it is the same to all, and there certainly is no discrimination, which is the thing complained of, and not the rates. We have no desire to work any hardship or retaliation to any person or community; we had a tariff in force which we thought and intended to be in the best interest of all parties; our first notice to the contrary is your suit, and pending that or a settlement, we simply adopt the Commissioner's schedule.

It would be very absurd for me to think of attempting coercive measures with your Commission, and I beg to assure you I had no such intent, notwithstanding all you may have heard to the contrary. I am candid in the desire to be in harmony with your Commission, and with our patrons, and to do what is fair and right in the adjusting of our tariffs, to comply with the law, and to avoid all discriminations, and now submit with this statement, can you not reconsider your conclusions and name an early day:

for a meeting when the matters complained of can be heard from on both sides and harmonized? If we fail, all your present resources are still with you. I enclose our schedule.

Yours truly,

GEO. L. BRADBURY,
General Manager.

GEORGE L. BRADBURY TO ISAAC N. PHILLIPS.

INDIANAPOLIS, IND., June 2, 1892.

Mr. Isaac N. Phillips, Chairman R. R. & W. Commission, Bloomington, Ill.

MY DEAR SIR—Referring to my letter of May 20, will you not kindly give me an answer at your early convenience?

Very truly,

GEO. L. BRADBURY,
General Manager.

ISAAC N. PHILLIPS TO GEORGE L. BRADBURY.

BLOOMINGTON, ILL., June 6, 1892.

George L. Bradbury, Esq., General Manager L. E. & W. R. R., Indianapolis, Ind.:

DEAR SIR:—I have your letter of June 2, in which you ask me to give you an answer to yours of May 20.

The case is just this: The Railway Board, on the advice of the Attorney General, authorized a prosecution against your company for charging in one case more, and in another case the same, for a longer than for a shorter distance on the same class of goods, in the same direction. In a short time the jobbers of Bloomington were threatened that unless they had this suit dismissed their freights would be increased. I know positively from two sources that such threats were made, but am not at liberty to state my evidence. Thereupon freights were largely increased to Bloomington merchants; and having resorted to this retaliatory measure your company now proposes a meeting with the Commission to "harmonize" matters.

I am quite willing to believe that you did not personally devise a scheme of this kind, and that it was begun without your knowledge. I have information which points to the fact that the "bulldozing" policy had a strong abetter here in Bloomington. I think a man of your ability and experience would have known that this was a very poor way of "harmonizing" matters; and that a public official having any considerable spirit or self respect would not submit to even consider the question of compromise with the sword of Damocles suspended over his head.

The Railway Board meets in Springfield to-morrow, and will be in session there perhaps till Wednesday night. It is then expected we will adjourn to Chicago and hold a hearing there in which the Chicago & Northwestern Railroad is concerned. During this meeting I shall bring this question before the Board, of which I am only one member, and shall propose to the Board the making of a schedule of maximum rates for your road in pursuance of the statute quoted to you in a former letter.

Since getting your last letter, I have learned from the jobbers here that shipments are now actually being made and charged for at the rates named in your new tariff. That is to say, I have learned that you have actually put in as working rates from Bloomington to Illinois points, the schedule of maximum rates established by the Railroad and Warehouse Commission. This, as I indicated before, renders it necessary, in my judgment, that these maximum rates, so far as your road is concerned, should be revised with the object in view of the maximum being used as working rates. With a view to this, I have been collecting data with reference to your very much lower charges for like distances from Indiana points into this State, by means of which you are giving jobbers outside of Illinois an advantage over those at Peoria and Bloomington. It seems if you are not permitted to specially favor Peoria you are determined to "boycott" the whole State. This will, of course, bear upon the question of what constitutes reasonable rates. I do not think it can be shown that because goods *in transitu* cross a state line, the road is entitled in reason and justice to make the freight cheaper than upon goods which are transported wholly within the State.

If my colleagues agree with me upon the necessity of this action, I will say that after our schedule is completed, if you desire to be heard upon the question as to whether it is a reasonable and proper schedule, an opportunity will be given you to appear before the Commission in person, or by such representative as you may desire.

I see no need for any other or different consultation than this in the present aspect of affairs touching this prosecution.

Very truly yours,

(Signed)

ISAAC N. PHILLIPS,

Chairman R. R. and W. Commission.

GEORGE L. BRADBURY TO ISAAC N. PHILLIPS.

INDIANAPOLIS, IND., June 7, 1892.

Mr. Isaac N. Phillips, Chairman R. R. and W. Commission, Springfield, Ill.:

DEAR SIR:—I have your favor of the 6th inst. I am unable, as yet, to ascertain the real cause for the suit. The case seems to have been worked up against us, and I regard it as purely technical. If there has been any abettor at Bloomington I am certainly not aware of it. I find a difference between the Commission and ourselves, and ask simply for a hearing, which you do not seem disposed to grant me. Our traffic department is now, and has been for some time, engaged upon a tariff that will comply with the clause of the law which we are now sued upon. I say, unhesitatingly, if the railroads of Illinois would undertake to comply with that clause literally, you would hear of more complaints than any commission has ever yet encountered. We find it almost impossible to work up a tariff under it except, perhaps, by using one-hundredths of a cent. I desired to explain all this to you, and to show you the difficulties under which we labor, which I could do so much better verbally than by letter. As an illustration, permit me to say, we a short time since desired to put a commodity from Sandusky, Ohio, into East St. Louis, via Bloomington and the C. & A., when we found the C. & A. rates from Bloomington were higher than the rate we had to make from Sandusky. As soon as we can harmonize a tariff for Illinois we shall put it into effect. Should your Commission decide at any time to give me a hearing, I will be glad to attend. I have never known of a case before where either a State or Inter-state Commission declined to give a hearing to a road complained of, or when a suit was brought without first giving

the road an opportunity to correct a technical violation, if any, and yet I assume your only purpose is to do your duty. Whatever schedule your Commission may adopt we will expect to carry out in good faith; in fact, a suggestion would be complied with, the same as your order. I feel that I have offered to do my whole duty in this matter, and in a proper spirit.

Very truly,

GEORGE L. BRADBURY,
General Manager.

GEORGE L. BRADBURY TO ISAAC N. PHILLIPS.

INDIANAPOLIS, IND., June 10, 1892.

Mr. Isaac N. Phillips, Chairman R. R. and W. Commission, Bloomington, Ill.:

DEAR SIR:—Our traffic department have prepared a tariff on freights for Illinois points which is a material reduction from Commissioners' rates, and I have ordered it into effect, hoping it may prove very satisfactory. I think I could readily convince you of the inconsistency of the claim under which the suit against us is brought.

The Commissioners' tariff applied to this road, violates the section. Under it the rates from Peoria to Carlock, thirty miles, and to Congerville, twenty-six miles, are the same. Again, from Bloomington to Rankin and Kirks, one being sixty and the other fifty-six miles, the rates are the same; and many other points are similar. It is now twenty-one years since the act was promulgated, and this question has never before been raised to my knowledge. There is not a railroad in the country that has not adopted the blocking system for making rates, and that system has received the approval of the Inter-state and all State Commissions so far as I know; in fact, it is difficult to see how any other could be used without causing great distress and discrimination. I think you will admit this when you come to go into the question more fully. The Commissioners' tariff made upon a mileage grade alone, cannot be used except for short distance; nor can a tariff be made on that scale alone that would not work a hardship to either the railroads or people.

This company desires to be in harmony with its patrons and with the laws. I am of the opinion, however, that no one not in the position to encounter them can truly judge of the many difficulties under which we labor in meeting the varied questions arising.

Very truly,

GEORGE L. BRADBURY,
General Manager.

ISAAC N. PHILLIPS TO GEORGE L. BRADBURY.

BLOOMINGTON, ILL., June 11, 1892.

Mr. Geo. L. Bradbury, General Manager L. E. & W. R. R. Co., Indianapolis, Ind.:

DEAR SIR:—I have your two letters written since my last. In the one received this morning you say you have ordered in a modified tariff for Illinois. I have not time just now to reply to you as fully as I wish. I assure you I do not mean to be unreasonable with your road, or any other. I am aware that as a practical railroad man, you know a great deal more about railroad business and freight tariffs than I do. As a member of

the Railway Commission, I have generally acted on the supposition that railroad men know their own business better than I do. I intend, so far as I am able to perform the public functions I am appointed to perform; and I intend to perform them without any captious and oppressive measures against railroads. I have tried not in any case to be controlled by public clamor. I believe that the way to have good railroad service is to have the railroads of the country prosperous; and I further believe that their being prosperous is not incompatible with the interests of the people, but subserves those interests.

I am glad you have under consideration a different freight tariff from the one now in use, and I hope all efforts of your agents to make capital for your company out of the exceedingly lenient maximum rates of the Railway Commission will at once cease. It is the very last thing you can afford to seek a popular advantage from. I further hope the schedule you are about to put in will prove of such a character that it will render the contemplated action of the Railway Commission unnecessary.

I have further to say, if you have views you wish to place before the Commission upon the general subject of freight rates, and wish a conference for that purpose, as I now understand from your last letters, you will be heard early, and as fully as you may desire. I understood the conference you asked for referred particularly to the suit now pending at Bloomington; and, concerning that particular matter, I did not care, in view of facts fully stated by me before, to have any conference. I assure you, that as a member of the Railway Board, I have no disposition to reject light or counsel from any proper source, and certainly not from those far more experienced and much wiser than I am concerning railway freight matters.

I mean you to understand from this letter, that if you approach this subject in what I conceive to be the proper spirit, I will meet you half way; and you will not, I think, find me unfair or unreasonable in the treatment of your company.

I speak, of course, only for myself, but have no doubt what I here say will be approved by my colleagues.

Very truly yours,

ISAAC N. PHILLIPS,

Chairman Railroad and Warehouse Commission.

No. 22.

TRAIN SERVICE.

CORRESPONDENCE CONCERNING THE STOPPING OF CERTAIN TRAINS AT MT. FOREST AND WILLOW SPRINGS, HAD UPON THE LETTER AND PETITION OF S. T. HART, VILLAGE CLERK OF SPRING FOREST.

LETTER OF C. H. CHAPPELL TO J. H. PADDOCK.

CHICAGO, ILL., September 14, 1892.

J. H. Paddock, Esq.: Secretary Railroad and Warehouse Commission, Springfield, Illinois:

DEAR SIR:—I am in receipt of your communication of September 13, giving copy of letter from S. T. Hart, Village Clerk of Spring Forest, and in reply beg to say: The stations of Mount Forest and Willow Springs are about half mile apart, and we have for the last two or three years declined to stop all of our trains at both stations.

Going north, train No. 7, passing Willow Springs and Mount Forest about 7:00 A. M. makes both stops; train No. 9, passing about 9:00 A. M. stops only at Willow Springs; train No. 5, about 12:30 noon stops at both stations; train No. 1, about 6:30 in the evening makes both stops.

Going south, train No. 2, about 10:00 A. M. makes both stops; train No. 6, at 1:45 P. M. makes both stops; train No. 10, at 5:45 in the evening, stops only at Mount Forest.

We think these ample accommodations and more than we should really be called upon to furnish. One stop should answer for all the business in that vicinity.

Yours very truly,

C. H. CHAPPELL,
General Manager.

LETTER OF J. H. PADDOCK TO S. T. HART.

November 11, 1892.

S. T. Hart, Esq., Village Clerk, Spring Forest, Ill.:

DEAR SIR:—I have placed your communication of November 4th before the Commission, at its meeting to-day, and, after considering the same, the Commission direct me to say:

1. The enforcement of the ordinances of your village against the high speed of trains is a question with which the Railroad and Warehouse Commission has nothing to do, that being a matter for the consideration of your village officials.

2. Neither has this Commission anything to do with the fact of your being carried by your station on one or more occasions, when you rode upon Chicago & Alton trains.

3. There is no rule of law which compels a railroad to stop its trains at any certain station, simply because it has formerly done so.

4. The measure of duty of a railroad company is to give a reasonable train service to its patrons under all the circumstances. The Supreme Court of Illinois has held that a contract made by a railroad company to maintain a station at a certain point is not binding upon the company, it being a matter of public policy, and that policy requiring every company to furnish a *reasonable accommodation* to all its patrons; and, that what is a reasonable accommodation, is not to be controlled by a contract of the company. Even though a company had agreed to furnish a station at a certain point, yet if the necessities of the public required the stop to be made at another place rather than the one covered by the contract, it would be the duty of the company, notwithstanding its contract, to change the stopping place. This is the substance of the law as declared by the Supreme Court of this State.

M. & O. R. R. Co. v. People, 132 Ill., 559.

5. Upon consideration of the whole case, the Commission are of opinion that the present train service furnished by the Chicago & Alton R. R. Co., at the two stations in question (Mt. Forest and Willow Springs), is a reasonable service; that any suit to enforce a different service would probably fail. They therefore order that your complaint be dismissed.

This letter embodies the opinion of the Commissioners upon your application, having been dictated by the Chairman of the Board, with the concurrence of his associates.

Very respectfully,

(Signed)

J. H. PADDOCK

Secretary.

No. 23.

SWITCHING CARS.

LETTER OF ISAAC N. PHILLIPS TO H. A. FISHER, CONCERNING THE SWITCHING OF CARS.

BLOOMINGTON, ILL., Jan. 19, 1893.

Mr. H. A. Fisher, General Manager St. L., A. & S. R. R. Co., Alton, Ill.:

DEAR SIR:—In closing up the business of the present Board of Railway Commissioners, I find in a pigeon-hole your letter of August 10, 1892, which I greatly fear has never received an answer. Wishing to leave as little unfinished business as possible to our successors, and recognizing the importance of the question, I now answer your letter. Since in the long time that has elapsed you may have forgotten the precise point of inquiry, I here quote your letter in full:

"I have read with interest your pamphlet No. 19, containing the Attorney-General's opinion in regard to switching cars of competing lines at common points, but the C. & A. has sprung a new feature on me. They

now take the position that they are not compelled to switch our cars, either loaded or empty, to and from their 'wagon loading tracks.' Tracks on which no permanent industries are located, but which are used for public or miscellaneous loading and unloading. How is it?"

In answer to this, I have to say, that in my judgement, the position taken by the C. & A. management does not conflict with the spirit, and I think not with the letter, of the Attorney-General's ruling; nor does it violate the law as I understand it. I think there is a clear distinction between the case of a permanent "industry" located upon a line of road, having its own switch tracks for the loading and unloading of cars, and a company's team track which it has built to accommodate its own patrons. Each railroad company doing business in any city or town is under obligation to furnish its patrons with reasonable terminal facilities, which would include tracks for loading and unloading by wagon and the like. If cars are shipped to any city or town on one road, I do not think it reasonable, merely because the merchandise track of another company in such town or city happens to be more convenient to the consignee of the cars, that he should require the company over whose line his merchandise was not hauled to furnish its terminal facilities for his use.

Nor do I think it a reasonable proposition that the railroad which has the haul should require some other road to furnish terminals, team tracks, etc., for the use of its patrons or of itself.

The case is somewhat different where a permanent industry is located upon a line of road. Such industry usually has its own track. In such case I do not believe that the managers of the road on which the industry is located can compel the owners of such industry or factory to patronize only their own road; which would in effect be the case, if they could decline to switch cars coming over other lines of road to such industry or factory. Nor do I think the managers of the road on which such industry is located could refuse to take its cars and deliver them at junction points to other lines of road. To compel a company to switch cars under such circumstances is not compelling them to furnish terminal facilities for the use of other companies.

In the case put in your letter, it would simply be making one company furnish its merchandise tracks to the patrons of another road, which I do not think the law requires.

Apologizing for the great delay in answering your letter, I remain,

Very truly yours,

ISAAC N. PHILLIPS,

Chairman R. R. and W. Commission.

No. 24.

FURNISHING CARS.

LETTER OF ISAAC N. PHILLIPS TO WILLIAM GODDARD,
RELATING TO THE DUTY OF FURNISHING CARS.

BLOOMINGTON, ILL., January 19, 1893.

Mr. William Goddard, Supt. Perry Co. Coal Mining Co., DuQuoin, Ill.:

MY DEAR SIR:—In closing up the business of the present railway board, preparatory to going out of office, I find a letter from you of October 7,

1892, which I fear has not been answered. I will therefore now answer your questions in their order, to the best of my understanding of the law.

You ask, first, whether you have any legal resource against a railroad company, on whose line you are located, if it fails to furnish cars, or furnishes only a part of what are ordered. In answer, I will say that a railroad company is bound to use reasonable diligence and foresight to supply the wants of its customers in the matter of cars. Such company is bound to keep on hand and to furnish cars to meet all the ordinary wants of its customers. Such demand for cars as it may reasonably foresee, it is under a legal obligation to supply. If exceptional circumstances arise, and there is an unusual and unexpected demand for cars, at some particular time, owing to a rush of traffic, then the railroad company would not be held responsible for a failure to do that which its managers could not reasonably expect would be required of it. Such is the legal duty of a railroad company in the matter of furnishing cars, as I understand it.

Your second inquiry is, whether a railroad company has a right to furnish cars to mines not located on its road in preference to mines that are so located. In answer, I will say I do not think it would be a reasonable exercise of its rights, or a legal compliance with its duty, for a company to send its cars off of its line for use elsewhere, before the reasonable demands of the patrons along its own line had been supplied.

Your next inquiry is, whether, in case cars are so furnished by a company to industries located off its line, to the denial of the rights of customers on the line, that circumstance would afford a rightful claim for damage. Certainly, if a railroad company, for any reason, fails to supply cars to patrons on its own line, when it is reasonably within its power to do so, such company would be liable in damages for the failure. I think if a railroad company should send its cars away when its managers knew they were needed at home, or when, by the exercise of reasonable judgment, they would have so known, such fact would be ground for an action for such damages as the patron could prove he had suffered from the failure to furnish cars to the extent they could have been furnished had not the cars been thus needlessly sent away.

Your next inquiry is, whether or not your company, being located on the Illinois Central, two miles distant from the junction of that road with the "Cairo Short Line," could lawfully demand cars from the C. S. L. when you are not connected with its tracks except by way of the Illinois Central. In answer to this, I would say I do not think you could in any event compel the Cairo Short Line to send its cars to you. I think a railroad company has a right to keep its cars on its own track if it sees fit to do so. Roads do interchange cars as a matter of convenience, and it is almost imperative that they should do this in order to transact the business of the country. I understand it is the duty of a company, when another road hauls a loaded car to the point of junction with such company, and delivers it to be hauled further, to take the car and haul it to its destination, or so far on the way as its track extends. In such case, the loaded car would be tendered to it at its own track, and there would be a legal obligation on the company to haul the car. But I do not think that a company having its business located on another line of road at a distance could demand cars from any road except the one on which it is located. Of course, if that road, by arrangement with other roads, gets cars of other companies for its patrons, as very often happens in practice, that would be another matter; but I do not think the distant company could be legally compelled to furnish its cars to industries on the tracks of other companies.

I have thus answered, I hope, specifically your questions, and trust my answers will be understood, and not *misunderstood*. The statute and the Common Law alike make it incumbent upon the managers of railroads to use all reasonable diligence and foresight to supply their patrons with cars for shipping purposes. It does not require them to foresee extraordinary demands and provide for them. Consequently, when traffic suddenly becomes unexpectedly heavy there is often a "car famine," and patrons seriously complain of being unable to get cars. In many such cases that I

have been cognizant of there was no liability on the part of the company for the failure, because the company had supplied themselves with enough cars for ordinary demands, and were not bound to constantly be ready for unforeseen exigencies.

Very truly yours,

(Signed)

ISAAC N. PHILLIPS,
Chairman R. R. and W. Commission.

No. 25.

THE INTERLOCKING ACT.

LETTER CONCERNING THE PROTECTION OF CROSSINGS ON THE L. E. & W. RAILWAY.

BLOOMINGTON, ILL., May 14, 1892.

Mr. George L. Bradbury, Gen. Manager L. E. & W. R. R., Indianapolis, Ind.:

DEAR SIR:—I call your attention to the large number of unprotected grade crossings of your company within the limits of the State of Illinois, and to the further fact that a statute was passed by the last General Assembly of Illinois under which these crossings can now be protected by a system of signals and derails worked by the interlocking system. (See Illinois Session Laws, 1891, 80-82). Under this act you will observe that you can, if you desire, proceed on your own motion by petition to properly interlock your crossings: or, in case this is not done, the Railway Commission is empowered to take the initiative, and, after hearing, order proper interlocking, apportioning cost and expense of operation and maintenance according to what they deem the justice of the case.

So far as the Commission have communicated with the railway managers of the state, a commendable disposition has been shown to go forward under this law and protect the many dangerous grade crossings of the state which are almost daily proving so destructive to life and property. All agree that not only the public interest, but proper economy and good railway practice, require that this work be done soon, and that the appliances used should be of the latest and best make, and in every way first-class. In this opinion I am led, by my knowledge of your reputation as an able and progressive railway manager, to believe you will heartily concur.

I count on your road, within Illinois, nine grade crossings and one junction point, outside the city of Peoria. The C. & A. management would, I am quite sure, meet you in a plan to suitably interlock the crossing of their tracks at the Union depot in this city; and I have reason to think the Illinois Central would not oppose the interlocking of either of their two tracks, which you cross at grade in this state. Some companies prefer to have the Commission proceed without petition, and we have already done this in several cases. I may say we are quite willing to proceed without petition where the companies, for any cause, do not wish to take the responsibility of the proceeding.

My attention has recently been called quite pointedly to the fact that freight engineers are in the habit of disregarding the law which requires full stops at grade crossings. I have, myself, recently observed passenger engineers do the same thing. They prefer to "take chances" rather than lose the time and take the trouble required to stop and again get under

way. Occasionally a train is in the way, and then, as in the case of the Jacksonville disaster, the innocent public must suffer death and maiming, and the company at fault has to pay enough in damages to more than interlock the crossing.

The Railway Commission of this state will be glad to have you signify, at an early day, what the disposition of your management is with reference to the speedy interlocking of your grade crossings. The function of the Railway Commission in the premises is, as you will see from the act, to serve the public interest; and it seems to be pretty fully conceded by all good railroad men that both the public welfare and good business economy require that all grade crossings be interlocked.

Awaiting your early attention to this important matter, I remain,

Very truly yours,

ISAAC N. PHILLIPS,
Chairman R. R. & W. Commission.

No. 26.

COMPLAINT NO. 97, FOR FAILURE TO REDEEM COUPONS OF COMMUTATION TICKET.

JOHN C. SHIRLEY,

vs.

CHICAGO & NORTHWESTERN RAILWAY CO.

OPINION OF THE COMMISSION.

BY PHILLIPS, *Chairman*:

Shirley purchased of the Chicago & Northwestern Railway Co. a "monthly commutation ticket," good for sixty rides in the month of May between Chicago and Lakeside, a distance of eighteen miles. The ticket cost \$6.50, or at the rate of 10½ cents per ride. Fifty-five of the sixty coupons were used in the life time of the ticket. Five remained unused; and these unused coupons were presented by Shirley to the company for redemption under the act of 1875. Shirley claims that fifty-five cents should be refunded to him as the redemption value of the ticket. His theory is that the five coupons are redeemable at their cost price. The company refused to redeem the five unused coupons at the rate stated, or any other rate, claiming that they were without any redemption value under the statute.

The statute relied upon is the act of 1875, section 5 of which provides:

"That it shall be the duty of the owner or owners of railroad or steamboats, by their agents or managers, to provide for the redemption of the whole or any parts or coupons of any ticket or tickets as they may have sold, as the purchaser for any reason has not used, and does not desire to use, at a rate which shall be equal to the difference between the price paid for the whole ticket and the cost of a ticket between the points for which the proportion of said ticket was actually used," etc.

Under this ungrammatical and clumsy provision, was anything due Mr. Shirley from the railway company upon the remaining five coupons of his sixty-ride ticket?

This coupon ticket was by its terms not transferable. It could be used only by Shirley himself, whose name was written upon it. The courts hold the condition which prohibits the transfer of commutation tickets to be reasonable and therefore legally enforceable. Shirley's ticket could then have no general market value, because a third party could use it only by perpetrating a fraud upon the company. If the ticket had any value, that value is measured solely by the statutory liability of the issuing company under the section above quoted.

If each coupon of a commutation ticket is redeemable at its cost price, as contended, then it is evident that any passenger can compel the company to carry him at the lowest commutation rate, whether he rides much or little. That is to say, if the regular fare between two stations seven miles apart be twenty cents, and the company puts on sale ten-ride commutation tickets between these stations at one dollar, or at the rate of ten cents per ride, the reduction being made in consideration of ten rides being taken at one purchase, then no patron of the company need pay more than ten cents per ride between these points; because he can purchase a ten-ride ticket, use one coupon for a single ride, present the remaining nine coupons to the ticket agent at the end of the journey for redemption, and receive back ninety cents.

This merely illustrates one of the consequences of admitting the contention of complainant. Such a consideration, however, cannot control the present decision. We are to determine what the section of the statute above quoted means, and its meaning must be found in the language used. It is not a question as to what the law ought to provide, but what it does in fact provide.

The statute says the company shall "*provide for the redemption of the whole or any parts or coupons of any ticket,*" etc. This redemption was to be made, according to the language of the statute, "*at a rate which shall be equal to the difference between the price paid for the whole ticket and the cost of a ticket between the points for which the proportion of said ticket was actually used.*"

Had the law-makers meant that coupons should be redeemed at their cost price they could have said so in a word; they did not say so but said something else, namely, that the difference between the price paid for the whole ticket and what it would have cost the passenger to have bought a ticket for the riding actually done on the ticket shall be the redemption value. The language of the section is a little awkward and a trifle muddy, but the above is its clear meaning.

The question then is, could Mr. Shirley have ridden fifty-five times between Chicago and Lakeside for less than \$6.50, the cost of the ticket, either by paying regular fares, or upon any other style of commutation ticket issued by the company? If he could have done so, then he was entitled, under this statute, to the difference between what it would have cost him to ride fifty-five times and the \$6.50 he paid. For instance, if the company at the time this ticket was purchased would have sold Shirley fifty-five rides for \$5.95, then clearly Shirley has, under the company's own practice, ridden but the worth of \$5.95, and is entitled under the language of the above section to the fifty-five cents he claims, but not otherwise.

It does not appear, however, that the difference between the price paid and "*the cost of a ticket between the points for which the proportion of said ticket was actually used,*" would in this case be anything.

We therefore hold that the ticket has no redeemable value under the statute. The complaint will be dismissed.

Adopted January 17, 1893.

No. 27.

PROTECTION OF CROSSING AT LITCHFIELD.

THE JACKSONVILLE, LOUISVILLE & ST. LOUIS RAILWAY CO.,

*Petitioner.**vs.*

THE ST. LOUIS & CHICAGO RAILWAY CO.,

Respondent.

ORDER OF THE COMMISSION.

WEDNESDAY, January 18, 1893.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, this day, present Isaac N. Phillips and J. C. Willis, Commissioners, the following proceedings were had in this cause:

The Commission being fully advised in the premises, find that it is impracticable to interlock the crossing described in the petition by a separate device, but that the same, together with the crossing of the Wabash Railroad and the Jacksonville, Louisville & St. Louis Railway, in which latter crossing a petition has been filed (numbered 9 upon the docket of the Commission,) should be interlocked with a single system.

It is therefore ordered by the Commission, that this petition be, and the same is hereby consolidated with said cause No. 9, entitled "*The Wabash Railroad Company v. The Jacksonville, Louisville & St. Louis Railway Company*," and that an order be entered in said latter cause covering both crossings.

Adopted January 18, 1893.

No. 28.

PROTECTION OF CROSSING AT LITCHFIELD.

THE WABASH RAILROAD CO.,

*Petitioner.**vs.*

THE JACKSONVILLE, LOUISVILLE & ST. LOUIS RAILWAY CO.,

Respondent.

FINAL ORDER OF THE COMMISSION.

WEDNESDAY, January 18, 1893.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, this day, present Isaac N. Phillips and J. C. Willis, Commissioners, the following proceedings were had in this cause.

And now this petition, No. 9, and also petition No. 10, this day consolidated by order of the Commission, having come on for final hearing and determination by the Commission, and the Commission having considered the evidence taken therein, the agreements made by the parties, and the arguments of counsel, and the Commission being fully advised in the premises, find that the public good requires that the crossings described in the said two petitions be protected by an interlocking device.

It is therefore ordered by the Commission that the said Jacksonville, Louisville & St. Louis Railway Company and the said Wabash Railroad Company shall proceed to protect the said crossings described in said petitions by an interlocking device, the plan and details of which may be agreed upon by said companies, provided they find themselves able to agree.

It is further ordered that the said Jacksonville, Louisville & St. Louis Railway Company shall pay the original cost of all the apparatus and mechanism of the said interlocking device used upon its own tracks and upon the tracks of the St. Louis & Chicago Railway Company (the latter being by agreement of the J., L. & St. L. Ry. Co.,) including all signals, derails, pipe lines, wire lines, boxing and all connections in the tracks of the said Jacksonville, Louisville & St. Louis Railway and the said St. Louis & Chicago Railway, and also all the cost of putting the same in ready for use, and of maintaining the same in good order and repair; and that the petitioner in this cause, the Wabash Railroad Company, shall pay the original cost of all the apparatus and mechanism used upon its own tracks, including all signals, derails, pipe lines, wire lines, boxing and all the connection in its tracks, also the cost of putting the same in ready use, and of maintaining the same in good order and repair.

It is further ordered that the cost of the interlocking machine proper, and the expense of maintaining the same in good working order be divided between the said Jacksonville, Louisville and St. Louis Railway Company and the said Wabash Railroad Company in the proportion that the levers used to operate the appliances in the tracks of each company bear to the whole number of levers used to operate said machine, the St. Louis and Chicago track being considered as part of the Jacksonville, Louisville and St. Louis for this purpose.

It is further ordered that the cost of the tower-house wherein the interlocking machine is housed, and the expense of the operation of said machine (i. e., wages of operators) shall be paid for, two-thirds by the said Jacksonville, Louisville and St. Louis Railway Company, and one-third by the said Wabash Railroad Company.

It is further ordered that this petition be held under consideration by the Commission pending the efforts of the companies to agree upon a plan of interlocking.

Adopted January 18, 1893.

No. 29.

PROTECTION OF CROSSING NORTH OF LITCHFIELD.

THE WABASH RAILROAD COMPANY,
Petitioner,
vs.

THE CHICAGO, PEORIA & ST. LOUIS RAILWAY COMPANY,
LESSEE ST. LOUIS & CHICAGO RAILROAD.

FINAL ORDER OF THE COMMISSION.

WEDNESDAY, January 18, 1893.

At a session of the Railroad and Warehouse Commission of the State of Illinois, held at its office in Springfield, Illinois, this day, present Isaac N. Phillips and J. C. Willis, Commissioners, the following proceedings were had in this cause:

And now this petition having come on for final hearing and determination before the Commission, and the Commission having considered the evidence taken herein, the agreements made by the parties hereto before the Commission, and the contract submitted to the Commission subsequently to the former hearing, and being fully advised in the premises, find that the obligations of the contract offered in evidence do not extend to the present parties, and that there are no contract obligations between the parties affecting the operation of the interlocking device to be put in at said crossing.

It is therefore ordered, in accordance with the agreements heretofore made before said Commission in open session that the said crossing described in the petition in this cause be protected by an interlocking device, the same being judged by the Commission to be necessary for the public safety; that one-half of the cost of such interlocking device, and of the expense of maintaining the same in good order and repair, and of operating the same, be paid by the said Wabash Railroad Company, and that the other half of such cost and expense be paid by the said Chicago, Peoria and St. Louis Railway Company, lessee, etc., this division being in accordance with the said agreements of the parties.

It is further ordered that this petition be held under consideration by the Commission pending the efforts of the said companies to agree upon a plan of interlocking.

Adopted January 18, 1893.

No. 30.

RAILWAY ACCOUNTING.

LETTER OF ISAAC N. PHILLIPS, CHAIRMAN ILLINOIS RAILROAD
AND WAREHOUSE COMMISSION.

UPON THE FOLLOWING QUESTION:

1. Shall the attempt to apportion expense of operation between the passenger and freight service be continued or abandoned?
2. Shall taxes be treated as a fixed charge or an operating expense?

BLOOMINGTON, ILL., April 9, 1892.

HON. WILLIAM O. SEYMOUR, *Chairman Committee on Uniformity of Railway Accounts, Washington, D. C.*

MY DEAR SIR:—I greatly regret that the illness of my wife must prevent me from meeting, on the 12th inst., with the Committee on Uniformity of Railway Accounts, of which I am a member with yourself and Mr. Brown, and likewise from attending the conference of Railway Commissioners to follow on the 13th. The considerable time devoted, and the courteous pains taken, by the Executive Committee of the Association of Railway Accounting Officers, to acquaint our Committee with the grounds upon which suggestions for changes in the form of report were made, render it proper, I think, that the conclusions of all members of the Committee, upon the important questions so intelligently discussed before us, be fully stated.

Touching the minor changes which were suggested in the form of report, there seemed, at our late conference in New York City, to be little difference of opinion. Prof. Adams, statistician of the Inter-state Commerce Commissioners, who met there with us, seemed disposed to adopt all such suggestions of the Committee as related merely to arrangement, form and nomenclature. We may, therefore, fairly suppose, that these minor suggestions will be substantially embodied by the statistician in the next "Analysis of Operating Expenses" which may be sent out for the guidance of accounting officers, and the same need not, therefore, be treated in detail in the report to be presented by our Committee.

QUESTIONS STATED.

The two vital questions with which we are to deal are:

First. Shall the attempt to apportion expenses of operation between the passenger and freight service be continued or abandoned?

Second. Shall taxes be treated as a fixed charge or as an operating expense? or, in other words, and more specifically, (as I understand the question) shall taxes be deducted from earnings before making the calculation to determine the "Percentage of Operating Expenses to Earnings" provided to be made on page 45 of the form of report?

These questions are of high importance. My enforced absence renders it perhaps proper that I should place before yourself and Mr. Brown, the conclusions at which I have arrived touching them, more fully than I had time to state those conclusion before we parted in New York.

I confess, I originally entered upon the consideration of the "suggestions," feeling strongly that our best course would be a conservative one. I felt, that a form of report which had been generally accepted, and put into use by the companies, should not be changed, except at the imperative demand of actual experience. I was accordingly at the date of the last conference at Washington, unwilling as a member of the Committee, to recommend either of the proposed changes now under discussion. The propositions contended for, to my thinking, then remained unproven by such preponderance as the case required; though I had grave doubts upon both questions at the time. The very full discussion, had before our Committee at New York on March 22nd and 23rd, enforced very strongly and and fully the reasons for the changes proposed; and for one, I am quite ready to speak out upon those questions in the report to be presented.

DIVISION OF EXPENSES.

First, as to the division of operating expenses between passenger and freight service: It is well known, that a large proportion of the expenses of operation is common to both the passenger and freight service, but exclusively chargeable to neither. Salaries of general officers, station agents, and telegraph operators, expenses of the maintenance of way and structures, and other like expenses, will serve as examples of those outlays which do not naturally divide between the passenger and freight service. Other expenses there are that classify themselves. What per cent of the entire expense of operation is incapable of being accurately classified, is variously stated; the lowest estimate being forty per cent. while some allege the amount to be as high as sixty per cent., of the entire expense. This large proportion, expended for the common benefit of both branches of the service must, therefore, if apportioned at all, be divided in accordance with some arbitrary general rule. The rule now used is stated upon page 42 of the form of annual report in these words:

RULE OF INTER-STATE COMMISSION.

"All expenses which are naturally chargeable to either passenger or freight traffic should be entered in their respective columns; expenses which are not naturally chargeable to either traffic should be apportioned on a mileage basis, making the division as between passenger and freight traffic in the proportion which the passenger and freight train mileage bears to the total mileage of trains earning revenue."

"Mixed trains will continue to be treated for the present as one-fourth passenger and three-fourth freight."

MIXED TRAINS.

I may observe, first, that the rule referring to mixed trains appears, so far as I can learn, to rest upon nothing more definite or valuable than some one's conjecture, and the identity of the conjecturer seems to be unknown. That it is based upon any experience, or upon any theory, that finds a basis in the facts of the railway business of the country, has never been made apparent. This arbitrary rule, that one-fourth of the expense of all mixed trains must be charged to the passenger service and three-fourths to the freight service, is applied alike to those roads which

do a large passenger traffic, and upon which mixed trains are a rare exception, and likewise upon frontier roads where both passenger and freight traffic is conducted exclusively by mixed trains. There are several roads of the latter class in the State of Illinois; and in the West it may be said generally that freight trains carry a few passengers in the "caboose." Whether every freight train which carries passengers at all would be classed as "mixed," I do not know; but certainly, if such trains are so classed, egregiously wrong results would be obtained under this rule, for on the roads of the West many trains, carrying a heavy tonnage of freight, frequently carry an average of two or three passengers whose transportation forms but a mere incident of the entire service of the train.

Without going into a detailed argument it will appear that the basis so furnished for the division of expenses of mixed trains must be of little value, and, while the volume of "mixed" service is, perhaps, on the whole, not large, it seems to me, either a rule which will produce results substantially correct and true should be found, or else the effort to classify the common expenses of mixed trains should not be attempted.

WORKING OF THE RULE.

The most obvious test of the rules, given for both mixed and distinct trains, would be the results of experience in using them. The test of actual practice fails to satisfy me that these rules are of any utility, either to the companies or to the States or the nation. Indeed, if not substantially correct, they could not be expected to be useful, and may prove positively vicious. We know that results have been reached by the application of these rules for division, which are grossly erroneous, not to say proposterous. To illustrate, I quote from certain letters of Stuyvesant Fish, president of the Illinois Central Railroad Company. The first concerns the report of that Company for the year 1890. Mr. Fish writing to Chairman Cooley said:

"The arbitrary rule laid down by the Commission, for the distribution of expenses between the passenger and the freight service, make it to appear that the Illinois Central earned $\frac{37}{100}$ of a cent per ton of freight per mile, and only $\frac{34}{100}$ of a cent per passenger per mile. The case of the Dubuque and Sioux City Railroad is even worse, it being made to appear to earn $\frac{38}{100}$ of a cent per ton of freight per mile, while its average receipts per passenger per mile are made to appear to be $\frac{27}{100}$ of a cent less than the estimated cost of carrying each passenger one mile. Obviously, the rule of the Commission charges too much of the expense to the passenger, and too little to the freight service.

"Being unable to suggest a safe rule for dividing the expenses, we do not presume to criticise the one adopted by the Commission further than to point out wherein it fails of application to the business of the Illinois Central R. R. Co, and to submit that it is not right to draw conclusions from, or wise to predicate action upon, figures so obviously erroneous."

And again commenting upon the report for 1891 Mr. Fish says:

"The arbitrary rule laid down by the Commission for the distribution of expenses between the passenger and the freight service, make it to appear that the Illinois Central earned during the past year $\frac{33}{100}$ of a cent per ton of freight per mile, and that it lost $\frac{77}{100}$ of a cent per passenger per mile, and that its entire passenger business was done at loss of \$141,715.37."

Roads could perhaps be found, reporting to the Interstate Commission, whose business is so divided between the passenger and the freight service, and is performed under such conditions, as to render the rule now in use as near right as any general rule that could be devised. Evidently that rule, as Mr. Fish says, fails of proper application to the business of the Illinois Central Railroad Company; and, not improbably, other roads may be found, from whose reports, following this rule, it would appear, that instead of too much expense being charged to passenger service and too

little to the freight, as in the case of the Illinois Central Company, it would be found, that too much is charged to freight and too little to passenger. I have no such case at present in mind; but the varying conditions, under which the different railroads of the country do business, and the wide difference in the character of their respective traffics, render it highly probable that such cases exist, and might be found, if searched for.

In answer to one of the above letters of Mr. Fish, Judge Cooley among other things wrote:

"I understand very well, that it is absolutely impossible to so apportion the cost of freight and passenger service as to reach accurate results. Nevertheless, if it is desirable to obtain the statistics of the roads at all, they ought to be obtained on the same basis. (?) They would not otherwise be of much value. Our blank reports, therefore, are the same for all the roads. * * * * *

"I may, perhaps, with propriety add, that I can very well see, that the application of the rule does not lead to correct information regarding the cost of passenger traffic, considered by itself; and, if the matter were exclusively in my hands, I should probably make considerable change. It is too important a matter, however, to act hastily upon; and I think any action should be taken with the full accord of the Association of Railway Accounting Officers."

I inclose herewith copies of Mr. Fish's letters, and a copy of the letter of Judge Cooley from which I have quoted above; likewise a copy of a letter of Mr. J. C. Welling, vice president of the Illinois Central road; all of which you and Mr. Brown may, I think, find instructive upon this question. I submit to your judgment whether these letters might not with benefit be placed before the conference of Railway Commissioners when our report is under consideration.

OPINIONS OF ACCOUNTING OFFICERS.

Referring to the statement quoted above from Judge Cooley, that "any action should be taken with the full accord of the Association of Railway Accounting Officers," it may be noted that the opinions of the Railway Accounting Officers, in the Association and out, which have, through the kindness of the statistician, been collected for the use of our Committee, are practically unanimous in favor of discontinuing the attempt to apportion expenses between passenger and freight traffics. Thus we have the "full accord of the Association," which his Honor, Judge Cooley, thought desirable; and, while I am aware that railway officials do not always view questions of this kind from the standpoint of the public interests, as it is the duty of Railway Commissioners to view them, still, as regards this matter I am convinced, after full reflection, that the public interest is not antagonistic to that of the companies themselves, and that all the recommendations are made in the utmost good faith.

PURPOSE OF THE DIVISION.

And this brings me to a consideration of the purpose of requiring this division which it is admitted must be made, if at all, upon an arbitrary basis. It has been said (and we should meet the case squarely) that the fixing of tariff rates for the transportation of passengers and freight, under governmental authority, is likely to become one of the leading functions of the Railway Commissions of the country, and that it is therefore desirable, that statistics be collected from which can be derived the information called for at page 61 of the Commissioner's form to be used as a basis for the fixing of maximum freight and passenger rates. It is said such items as "estimated cost of carrying each passenger one mile," "passenger earnings per mile of road," "passenger earnings per train mile," "estimated cost of carrying one ton one mile," "freight earn-

ings per mile of road," "freight earnings per train mile," are necessary as a basis for the fixing of rates, and should be preserved even though perfectly correct results are not obtained

Every one will admit that if the items of cost of freight and passenger service above quoted from the form at page 61, could be obtained with substantial correctness, the information would be valuable; and it would certainly be quite as valuable for the roads as it would be for Railway Commissions or other governmental agencies. But I have not yet arrived at the point of being able to see how a body of irrelevant statistics which are supposed to support another body of erroneous deductions, can be of practical value to any legislative or executive branch of government, any more than they would be valuable to the companies themselves. It is said a uniform basis must be adopted, and maintained, to secure the benefit of comparisons; but it is difficulty to under stand how, if one error is vicious and harmful, an accumulation of errors may become salutary: and it is quite as difficult to see, how true statistical instruction may be derived, by comparing a large number of errors more or less gross with each other.

I have little share anyway, in the expectation that just railway rates will ever be established through statistical tables showing "per mile," "per ton," or "per passenger" cost. I do not believe that information of this kind ever did furnish the basis for actually fixing tariff rates, or that it ever will: because I believe that even where Railway Commissions are clothed with power to fix rates, such rates will be made up upon a different basis, and depend upon different conditions, from any disclosed by such statistics. Particularly must this be true so long as the cost items per unit of traffic are confessedly erroneous, and do not represent the true facts of the case.

So far therefore, from the statistics obtained from this division being valuable as affording a criterion for railway rates, I believe that the very fact that this false information is liable to be so used, is the most cogent reason which could be given for ceasing to furnish a basis confessedly erroneous. A man who travels in the wrong direction is certainly as likely never to arrive at his destination as one who travels not at all.

By all this I do not mean to be understood as saying that unless absolutely correct and accurate information is obtained, the attempt to classify expenses should be abandoned. I do however, mean to say, that unless a result which is substantially and approximately correct can be had, it is better to leave the subject untouched, and to permit (if a cost criterion must be had) the statistics of each road to be estimated separately, and in the light of its own conditions of traffic, and I may add, be so estimated by those who may have the rate-making power, and who will presumably be as good "guessers" as those who may make future deductions from the body of false statistics we are now engaged in collecting.

UNIFORM BASIS NOT PRACTICABLE.

In the somewhat lengthy investigation we have made in this matter, one fact has arisen to a position of absolute clearness in my mind; which is, that no universal or uniform basis of such division of expenses will ever yield statistical results near enough correct to be of practical use, or indeed, not to be positively harmful.

When we consider that the proposed division of expenses must on, say, some coal road of Southern Illinois, which hauls an occasional passenger, be made by the same rule and upon the same basis which is applied to a passenger road connecting New York and Philadelphia or Philadelphia and Washington, what possible value can be expected in results so obtained.

If it were possible, as I believe it is not, in the case of any single road to arrive at a correct rule for apportionment of operating expenses, it

would remain doubtful whether the rule thus found would be applicable to any other road doing business in the country; and, certainly, it could never be applied to any considerable number of other roads.

Nor do I believe that any geographical classification of roads by groups, such as is now being attempted by the Interstate Commerce Commission, can be valuable as assisting to solve this difficulty. It is the character of the traffic, and the conditions under which the service is performed which must control this question, and point to the true rule; and those elements will not likely be found to arrange themselves upon geographical or sectional lines.

CLASSIFICATION OF TAXES.

Turning now to the second question above propounded, namely: how "taxes" shall be classed and treated in the report, I will say, I have been on this subject more slow in arriving at a conclusion, and it is perhaps fair I should add I am less confident in that conclusion than is the case with the other question as to the division of expenses.

The question is, whether or not taxes shall be transferred from the place where they now appear at page 31, under the head of "Deductions from Income" to the head of "Operating Expenses" found on page 45, on which latter page it is proposed taxes shall make a fifth item, under the sub-heading "Recapitulation of Expenses." If this is done, operating expenses complete would then appear under five items as follows:

1. "Maintenance of Way and Structures."
2. "Maintenance of Equipment."
3. "Conducting Transportation."
4. "General Expenses."
5. "Taxes."

If the word "expenses" is to be taken in a narrow sense, taxes would hardly be included. But as I understand the question presented it is not one simply of the meaning of words. Webster defines the word "expenses" as, "that which is expended, laid out, or consumed; cost; outlay; charge; as, the *expenses* of war." Substance is, however, more important than form, and things more tangible than words. The real object which, I assume, is sought by those who wish to place taxes in the list of operating expenses, is to secure the deduction of taxes from the sum of the earnings, before making the calculation to find what is the "Percentage of Operating Expenses to Earnings," which is provided to be stated at page 45 of the form of report. Of course taxes will be shown in any event, and wherever they appear, in a distinct item by themselves, and from the report of any given road it can readily be ascertained how much of the outlay shown is for taxes. It would therefore require but a small calculation, from the data given in the report to arrive at the percentage of operating expenses to earnings, with the taxes added in as an expense. I suppose the effect which is sought by the suggestion to be avoided is the formal and what may appear an authoritative statement of this percentage from so high a tribunal as the Interstate Commerce Commission which is apt, by reason of the great authority and dignity of that body, to be received by legislative and executive officials as a correct result without a critical examination in detail of the methods by which the result has been obtained.

It has occurred to me, no good reason could be alleged against making the statement of the percentage of expenses to earnings both ways: that is to say, with taxes excluded from the account of operating expenses, and also with the taxes included in that account. This might satisfy the fears of the railway officials, and would, so far as I can see, do no possible harm.

ANALOGY OF TAXES TO EXPENSES.

There is a sense in which taxes may logically be regarded as an expense. What are taxes? Taxes, so far as they concern railroads, are a charge which railroad property pays for the law and order under which civil society enables them to conduct their business; in short, it is what the road pays for the maintenance of civil government. If requisite protection to the property and business of a railroad company were not furnished by government, or if we could suppose a railroad to be operated in some land without governmental protection, then it would be necessary for such railroad to provide its own police protection and regulation, such as would accomplish for it the end which is now reached through government. If we thus suppose a railway company to be procuring this service for itself, we can see the resulting outlay would come strictly in the form of an expense, and stand upon the same basis as the wages of watchmen or other like employees. The sum paid for this purpose would then be as much an "expense of operation" as clerk hire, or the salaries of trainmen. But the railway companies of the land, in common with others, find an agency ready established which secures them in the enjoyment of their property and franchises, guarantees them the right to perform their functions under the shield of law, supplies them with police protection, affords them courts through which to enforce their contracts, and officers to administer the laws which fix their duty and liability to the public, and the duty and liability of the public to them. For this protecting agency which we call government, the railroads, like others, pay through the medium of taxes. They thus in substance pay for a service rendered them; and looking at the matter from this point of view, it would do no violence to the truth of the case if the certain sum so paid were called an expense of operation.

Be this as it may, however, this tax is a sum that must be paid and cannot possibly be escaped. Its amount and its payment are both beyond the volition of railway officials. It is a burden so inevitable that its very name has become associated in the public mind with death, and the phrase "as certain as death and taxes" has passed into common speech. Why then should this known and inevitable charge not be deducted as an expense, or at least *as if it were an expense*, when computing the percentage of expenses to earnings?

If I am correct in my understanding that what is desired is that taxes be deducted from earnings before making the computation which is to show to the world what per cent. of earnings are paid out as expenses, then I am free to say I see no objection to the suggestion being acceded to.

AN ADJUCATION.

My attention has been called to certain decisions of the Supreme Court of the United States which give an interpretation of the term "net earnings." The case of the *U. P. R. R. Co. vs. United States*, 99 U. S. 402, arose out of a claim made by the Union Pacific R. R. Co. for certain services alleged to have been performed for the government. The act which had granted certain land and bond subsidies to the company provided among other things that "after said road is completed, until said bonds and interest are paid at least 5 per centum of the *net earnings* of said road shall also be annually applied to the payment, etc." In adjusting the account between the government and the road it therefore became necessary to determine what were "net earnings" within the meaning of the statute; and it was held apparently without controversy that the item, scheduled by the company under the term "General Expenses (including taxes,)" should be deducted from the gross earnings in order to arrive at the net earnings from which payment to the government was provided by law to be made. Other items of the schedule of expenses set up by the company were controverted. Among the controverted items were "interest on bonds," "sinking fund bonds," and other like charges; but the item designated as expenses in the schedule furnished, and which

was stated to "include taxes" was permitted to be deducted from earnings without question. The decision referred to was later affirmed in other cases which I need not quote. These cases seem to establish as a proposition of law that "net earnings" must be found by deducting taxes with other operating expenses.

I know it may be thought this is not a question to be settled by legal precedents. If, however, we regard it as a question to be solved by considerations of public policy alone, it must still be remembered that that is never a sound public policy which does not tend to establish justice.

Not further to extend this letter, which has already been made much too long, my conclusion is that it is proper and right to deduct taxes along with operating expenses, whether calling them by the technical name "expenses" or not, from the earnings, before calculating the percentage of operating expenses to earnings; and I assent still more heartily to the proposal to abandon the present attempted apportionment of expenses between the two branches of passenger and freight service.

I have not attempted to here present all the considerations which have occurred to me in the progress and as the result of our investigations had upon these important questions. I doubt not other views yet more conclusive than any I have given will occur to the minds of my brethren of the Committee, and be embodied in the report which you present.

I authorize you to attach my signature to any report you prepare which embodies substantially the views herein expressed.

Again expressing my regret at being unable to meet with the Committee and with the Conference of Railway Commissioners, and heartily wishing that both meetings may prove as pleasant as profitable, I remain,

Very truly yours,

ISSAC N. PHILLIPS.

Signed :

INDEX.

A

	PAGE.
Accidents in Illinois.....	13, 90, 91
Atchison, Topeka & Santa Fe Railroad Co.—	
Officers of.....	99
Atchison, Topeka & Santa Fe Railroad Co., in Chicago—	
Officers and directors of.....	100
Average daily compensation of employes in Illinois.....	10, 70, 71

B

Baltimore & Ohio Railroad Co.—	
Officers of.....	101
Baltimore & Ohio & Chicago Railroad Co.—	
Officers of.....	101
Directors of.....	102
Better law needed.....	16
Belleville & Carondelet Railroad Co.—	
Officers and directors of.....	146
Belleville & Eldorado Railroad Co.—	
Officers of.....	146
Directors of.....	147
Belleville & Southern Illinois Railroad Co.—	
Officers and directors of.....	147
Blue Island Railroad Co.—	
Officers of.....	126
Directors of.....	127

C

Calumet River Railway Co.—	
Officers and directors of.....	140
Carbondale & Shawneetown Railroad Co.—	
Officers of.....	148
Directors of.....	149
Centralia & Chester Railroad Co.—	
Officers of.....	102
Directors of.....	103
Chicago & Alton Railroad Co.—	
Officers and directors of.....	103

	PAGE.
Chicago & Calumet Terminal Railway Co.—	
Officers and directors of	105
Chicago & Eastern Illinois Railroad Co.—	
Officers of	105
Directors of	106
Chicago & Erie Railroad Co.—	
Officers and directors of	107
Chicago & Grand Trunk Railway Co.—	
Officers and directors of	108
Chicago & Illinois Southern Railroad Co.—	
Officers and directors of	109
Chicago & Indiana State Line Railway Co.—	
Officers and directors of	109
Chicago & Iowa Railroad Co.—	
Officers of	113
Directors of	114
Chicago and Northwestern Railway Co.—	
Officers and directors of	110
Chicago & Northern Pacific Railroad Co.—	
Officers and directors of	111
Chicago & Ohio River Railroad Co.—	
Officers of	111
Directors of	112
Chicago & Springfield Railroad Co.—	
Officers and directors of	128
Chicago & State Line Railroad Co.—	
Officers and directors of	137
Chicago & Western Indiana Railroad Co.—	
Officers and directors of	102
Chicago & Wisconsin Railroad Co.—	
Officers and directors of	138
Chicago, Burlington & Northern Railroad Co.—	
Officers and directors of	112
Chicago, Burlington & Quincy Railroad Co.—	
Officers and directors of	113
Chicago, Havana & Western Railroad Co.	
Officers and directors of	127
Chicago, Madison & Northern Railroad Co.—	
Officers of	127
Directors of	128
Chicago, Milwaukee & St. Paul Railway Co.—	
Officers of	116
Directors of	117
Chicago, Peoria and St. Louis Railway Co.—	
Officers and directors of	117
Chicago, Rock Island & Pacific Railway Co.—	
Officers and directors of	118

	PAGE.
Chicago, Santa Fe & California Railway Co.—	
Officers of	99
Directors of	100
Chicago, St. Louis & Paducah Railway Co.—	
Officers of	147
Directors of	148
Chicago, St. Paul & Kansas City Railway Co.—	
Officers and directors of	119
Chicago Union Transfer Railway Co.—	
Officers and directors of	120
Claims for damages arising from erroneous inspection of grain.....	60,260
Classified freight traffic in Illinois.....	10, 60 to 65 inclusive.
Classification of railroads and mileage.....	4,24 to 27 inclusive.
Cleveland, Cincinnati, Chicago & St. Louis Railway Co.—	
Officers of	120
Directors of	121
Correspondence concerning schedules and rates of the L. E. & W. R. R.....	296
Complaint for failure to redeem coupons of commutation ticket—correspondence thereto	311
Consumption of fuel by locomotives in Illinois.....	13,86 to 89 inclusive.
Crossings equipped with interlocking and signaling devices	94,95
D	
Description of equipment entire line	11,72 to 77 inclusive.
DePue, Ladd & Eastern Railway Co.—	
Officers and directors of.....	122
Duties of the Commission	14
" " consulting engineer.....	17
E	
Earnings and income in Illinois.....	6,41 to 49 inclusive.
East St. Louis & Carondelet Railway Co.—	
Officers of	122
Directors of	123
East St. Louis Connecting Railway—	
Officers and directors of	123
Elgin, Joliet & Eastern Railway Co.—	
Officers of	123
Directors of	124
Employes and salaries in Illinois and entire line	10,66 to 69 inclusive.
Englewood Connecting Railway Co.—	
Officers and directors of	144
Evansville, Terre Haute & Chicago Railway Co.—	
Officers of	106
Directors of	107
F	
Financial Statement.....	49
Fulton County Narrow Gauge Railway Co.—	
Officers and directors of	124
Furnishing cars—correspondence thereto.....	308

G

Galesburg & Rio Railroad Co.—	
Officers and directors of.....	114
General expenditures in Illinois.....	7,50 to 57 inclusive.
Grain Inspection and Registration—	
Claims for damages arising from erroneous inspection.....	60,260
Inspection departments outside of the city of Chicago	18
Report of Chief Inspector	159
Report of Warehouse Registrar.....	172
Rules governing the inspection of grain.....	192
Rules for the administration of the department of grain inspection and ware- house registration in the city of Chicago	197
Storage of grain	18
Grand Tower & Cape Girardeau Railroad Co.—	
Officers and directors of	125
Grand Tower & Carbondale Railroad Co.—	
Officers and directors of	125
Grand Trunk Junction Railway Co.—	
Officers of	108
Directors of	109

I

Illinois Central Railroad Co.—	
Officers and directors of	126
Illinois Valley & Northern Railroad Co.—	
Officers and directors of.....	114
Income account entire line.....	5,32 to 43 inclusive.
Indiana & Illinois Southern Railroad Co.—	
Officers of	129
Directors of.....	130
Indianapolis, Decatur & Western Railway Co.—	
Officers and directors of	130
Indiana, Illinois & Iowa Railroad Co.—	
Officers of	130
Directors of	131
Iowa Central Railway Co.—	
Officers and directors of.....	131

J

Joliet & Chicago Railroad Co.—	
Officers and directors of	104
Joliet & Northern Indiana Railroad Co.—	
Officers and directors of.....	135

K

Kankakee & Seneca Railway Co.—	
Officers and directors of.....	121
Kankakee & Southwestern Railroad Co.—	
Officers of	128
Directors of	129

	PAGE.
Lake Erie & Western Railroad Co.—	
Officers and directors of.....	132
Lake Shore & Michigan Southern Railway Co.—	
Officers of.....	132
Directors of.....	133
Liverpool Coal Railway Co.—	
Officers and directors of.....	115
Leave to cross.....	241, 273, 290
Louisville & Nashville Railroad Co., operating Southeast & St. Louis Railway—	
Officers and directors of.....	133
Louisville, Evansville & St. Louis Consolidated Railroad Co.—	
Officers and directors of.....	134

M

Michigan Central Railroad Co.—	
Officers of.....	134
Directors of.....	135
Mississippi River Bridge Co.—	
Officers and directors of.....	104
Mobile & Ohio Railroad Co., operating St. Louis & Cairo Railroad—	
Officers of.....	135
Directors of.....	136

N

New York, Chicago & St. Louis Railroad Co.—	
Officers and directors of.....	136
Northern Pacific Railroad Co. (Lessee Wisconsin Central Lines)—	
Officers of.....	137
Directors of.....	138

O

Ohio & Mississippi Railway Co.—	
Officers and directors of.....	138

P

Passenger and freight traffic in Illinois.....	9, 58, 59
Passenger train service.....	288
Pawnee Railroad Co.—	
Officers and directors of.....	139
Pennsylvania Co.—	
Officers of.....	139
Peoria & Bureau Valley Railroad Co.—	
Officers of.....	118
Directors of.....	119
Peoria & Eastern Railway Co.—	
Officers of.....	121
Directors of.....	122
Peoria & Pekin Union Railway Co.—	
Officers of.....	141
Directors of.....	142

	PAGE.
Peoria, Decatur & Evansville Railway Co.—	
Officers and directors of.....	142
Petition to determine place of crossing.....	236
Pittsburgh, Cincinnati, Chicago & St. Louis Railway Co.—	
Officers and directors of.....	143
Pittsburgh, Fort Wayne & Chicago Railway Co.—	
Officers and directors of.....	140
Prosperity of the past year.....	14
Protection to crossing.....	242, 278, 294, 313

Q

Quincy, Alton & St. Louis Railroad Co.—	
Officers and directors of.....	115
Quincy, Omaha & Kansas City Railway Co.—	
Officers of.....	144

R

Railroads incorporated during the year ending June 30, 1892.....	155
Railroad officials.....	97 to 154 inclusive.
Rails, ties, ballast bridges, etc., in Illinois.....	12, 78 to 85 inclusive.
Railway accounting.....	816
Railway capital.....	4, 28 to 31 inclusive.
Railway safety appliances in the kingdom of Great Britain.....	209
Rock Island & Peoria Railway Co.—	
Officers of.....	144
Directors of.....	145
Rules governing inspection of grain.....	192
Rules for the government of the committee of appeals.....	202
Rules for the government of the assistant inspectors and helpers.....	204

S

St. Louis, Alton & Springfield Railroad Co.—	
Officers and directors of.....	145
St. Louis, Alton & Terre Haute Railroad Co.—	
Officers of.....	145
Directors of.....	146
St. Louis & Chicago Railway Co.—	
Officers of.....	117
St. Louis & Eastern Railway Co.—	
Officers and directors of.....	149
St. Louis & Peoria Railroad Co.—	
Officers of.....	149
Directors of.....	150
St. Louis Bridge Co.—	
Officers of.....	150
Directors of.....	151
St. Louis, Rock Island & Chicago Railroad Co.—	
Officers and directors of.....	116

	PAGE.
St. Louis Southern Railroad Co.—	
Officers and directors of.....	148
St. Louis, Vandalia & Terre Haute Railroad Co.—	
Officers and directors of.....	151
South Chicago Railroad Co.—	
Officers and directors of.....	129
South Chicago & Southern Railroad Co.—	
Officers and directors of.....	141
Statistical tables.....	21 to 95 inclusive.
Switching cars.....	265,307
Claims of extortion for switching.....	238

T

Tabulated statistics.....	3
Taxes paid in Illinois in 1890, 1891, 1892.....	14, 92, 93
Terminal Railroad Association of St. Louis—	
Officers and directors of.....	150
Terre Haute & Peoria Railroad Co.—	
Officers of.....	151
Directors of.....	152
The Belt Railway Co. of Chicago—	
Officers and directors of.....	102
The "J. S. E. Line".....	15
The Mississippi River Railroad and Toll Bridge Co.—	
Officers and directors of.....	101
Toledo, Peoria & Western Railway Co.—	
Officers and directors of.....	152
Toledo, St. Louis & Kansas City Railroad Co.—	
Officers and directors of.....	153
Train service—correspondence thereto.....	306

W

Wabash Railroad Co.—	
Officers of.....	153
Directors of.....	154
Wabash, Chester & Western Railroad Co.—	
Officers and directors of.....	154





